# Certifications

**WBENC:** 237019 **HUB:** 1752439743100-86536 **DBE:** VN 20657

**NCTRCA** WFWB38444Y0909

**NELAP Certifications** 

**Lubbock:** T104704219-08-TX **El Paso:** T104704221-08-TX **Midland:** T104704392-08-TX

LELAP-02003 LELAP-02002

Kansas E-10317

# Analytical and Quality Control Report

Jennifer Davis WTS Building 126 3RD Floor P.O. Box 363 WSMR, NM, 88002

Report Date: October 7, 2008

Work Order: 8080828

Project Name: HELSTF GROUNDWATER

Project Number: 65

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

			Date	111116	Date
$\mathbf{Sample}$	Description	Matrix	$\operatorname{Taken}$	$\operatorname{Taken}$	$\operatorname{Received}$
170067	HLSF-0085-HMW-014-0808	water	2008-08-06	14:15	2008-08-06
170168	HLSF-0085-HMW-055-0808	water	2008-08-08	13:16	2008-08-08
170170	HLSF-0085-HMW-010-0808	water	2008-08-07	10:20	2008-08-07
170455	HLSF-0085-HMW-054-0808	water	2008-08-11	10:08	2008-08-11
170457	HLSF-0085-D RW-008-0808	water	2008-08-11	12:55	2008-08-11
170843	HLSF-0085-HMW-043-0808	water	2008-08-13	09:45	2008-08-13
170986	HLSF-0085-DRW-017-0808	water	2008-08-14	10:30	2008-08-14
171111	HLSF-0085-HMW-062-0808	water	2008-08-18	14:00	2008-08-18
171300	HLSF-0085-HMW-008-0808	water	2008-08-19	10:48	2008-08-19
171303	HLSF-0085-HMW-034-0808	water	2008-08-19	12:46	2008-08-19
171731	HLSF-0085-HMW-033-0808	water	2008-08-21	09:42	2008-08-21
171733	HLSF-0085-HMW-059-0808	water	2008-08-21	11:45	2008-08-21
171735	HLSF-0085-DRW-016-0808	water	2008-08-22	10.25	2008-08-22
172137	HLSF-0085-DRW-114-0808	water	2008-08-27	13:35	2008-08-27
172139	HLSF-0085-DRW-014-0808	water	2008-08-27	13:35	2008-08-27

			$\operatorname{Date}$	$\operatorname{Time}$	$\operatorname{Date}$
$\mathbf{Sample}$	Description	Matrix	$\operatorname{Taken}$	$\operatorname{Taken}$	Received
172467	HLSF-0085-HMW-053-0808	water	2008-08-28	12:20	2008-08-28
172638	HLSF-0085-HMW-061-0908	water	2008-09-02	10.25	2008-09-02
172640	HLSF-0085-HMW-060-0908	water	2008-09-02	13:15	2008-09-02
172795	HLSF-0085-HMW-063-0908	water	2008-09-03	12:50	2008-09-03
172797	HLSF-0085-HMW-058-0908	water	2008-09-03	10:10	2008-09-05
172908	HLSF-0085-HMW-057-0908	water	2008-09-04	11:15	2008-09-04
172910	HLSF-0085-DRW-002-0908	water	2008-09-04	13:41	2008-09-04
173041	HLSF-0085-RB-001-0908	water	2008-09-08	15:30	2008-09-09
173043	HLSF-0085-HCF-003-0908	water	2008-09-08	12:00	2008-09-08
173045	HLSF-0085-HCF-103-0908	water	2008-09-08	12:00	2008-09-08

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 352 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Michael april

Dr. Blair Leftwich, Director

# Standard Flags

 $\boldsymbol{B}\,$  - The sample contains less than ten times the concentration found in the method blank.

# Case Narrative

Samples for project HELSTF GROUNDWATER, HELSTF GROUND-WATER, HELSTF GROUNDWATER, HELSTF GROUNDWATER, HELSTF GROUNDWA-TER, HELSTF GROUNDWATER, HELSTF STF GROUNDWATER, HELSTF GROUNDWATER, HELSTF GROUNDWATER, HELSTF GROUNDWATER and HEL-STF GROUNDWATER were received by TraceAnalysis, Inc. on 2008-08-06, 2008-08-08, 2008-08-07, 2008-08-11, 2008-08-11, 2008-08-13, 2008-08-14, 2008-08-18, 2008-08-19, 2008-08-19, 2008-08-21, 2008-08-21, 2008-08-22, 2008-08-27, 2008-08-27, 2008-08-29, 2008-08-28, 2008-09-02, 2008-09-02, 2008-09-03, 2008-09-05, 2008-09-04, 2008-09-04, 2008-09-09, 2008-09-08 and 2008-09-08 and assigned to work orders 8080828, 8081109, 8081110, 8081318, 8081319, 8081533, 8081820, 8082006, 8082103, 8082105,  $8082517,\ 8082518,\ 8082519,\ 8082824,\ 8082825,\ 8090219,\ 8090411,\ 8090412,\ 8090519,\ 8090520,\ 8090810,\ 8090811,\ 8091019,$ 8091020 and 8091021 respectively. Samples for work order 8080828 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8081109 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8081110 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8081318 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8081319 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8081533 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8081820 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8082006 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8082103 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8082105 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8082517 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8082518 were received intact without headspace and at a temperature of 4.0 deg C.Samples for work order 8082519 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8082824 were received intact without headspace and at a temperature of 4.0 dec C.Samples for work order 8082825 were received intact without headspace and at a temperature of 4.0 dec C.Samples for work order 8090219 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8090411 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8090412 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8090519 were received intact without headspace and at a temperature of 4.0 dec C.Samples for work order 8090520 were received intact without headspace and at a temperature of 4.0 deg.C.Samples for work order 8090810 were received intact without headspace and at a temperature of 4.0 dec C.Samples for work order 8090811 were received intact without headspace and at a temperature of 4.0 dec C.Samples for work order 8091019 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8091020 were received intact without headspace and at a temperature of 4.0 deg. C.Samples for work order 8091021 were received intact without headspace and at a temperature of 4.0 deg. C.

Samples were analyzed for the following tests using their respective methods.

Test	Method
Ag, Total	S 6010B
As, Total	S 6010B
Ba, Total	S 6010B
Be, Total	S 6010B
Cd, Total	S 6010B
Co, Total	S 6010B
Cr, Total	S 6010B
Cu, Total	S 6010B

Test	Method
Hg, Total	S 7470A
Ni, Total	$S_{6010B}$
Pb, Total	$S_{6010B}$
Sb, Total	$S_{6010B}$
Se, Total	S 6010B
Sn, Total	$S_{6010B}$
Tl, Total	$S_{6010B}$
V, Total	$S_{6010B}$
Zn, Total	S 6010B

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work orders 8080828, 8081109, 8081110, 8081318, 8081319, 8081533, 8081820, 8082006, 8082103, 8082105, 8082517, 8082518, 8082519, 8082824, 8082825, 8090219, 8090411, 8090412, 8090519, 8090520, 8090810, 8090811, 8091019, 8091020 and 8091021 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

65

# **Analytical Report**

## Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory:	Lubbock
-------------	---------

Analytical Method: S 6010B Prep Method: S 3010A Analysis: Ag, Total QC Batch: 51313 Date Analyzed: Analyzed By: RR2008-08-11 Prep Batch: 44004 Sample Preparation: 2008-08-11 Prepared By: KV

RL

Parameter	Flag	Result	Units	Dilution	$\operatorname{RL}$
Total Silver		< 0.00500	$\mathrm{mg/L}$	1	0.00500

# Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory: Lubbock

Analysis: As, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR Prep Batch: 44004 Sample Preparation: 2008-08-11 Prepared By: KV

RL

Parameter	$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Arsenic		< 0.0100	$\mathrm{mg/L}$	1	0.0100

# Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory: Lubbock

Analysis: Ba, Total Analytical Method: Prep Method: S 3010A S 6010B QC Batch: Date Analyzed: 51313 2008-08-11 Analyzed By: RRPrep Batch: Sample Preparation: 2008-08-11 Prepared By: 44004KV

RL

Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Barium		0.0120	$\mathrm{mg/L}$	1	0.00500

### Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory: Lubbock

Analysis: Be, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RRPrep Batch: 44004 Sample Preparation: 2008-08-11 Prepared By: KV

 $\overline{continued}$  . . .

Page Number: 5 of 352

Report Date: October 7, 2008

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 6 of 352

65

sample 170067 continued ...

		$\mathrm{RL}$			
Parameter	Flag	Result	$\operatorname{Units}$	Dilution	RL
		D.I.			_
		$\mathrm{RL}$			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Beryllium		< 0.00200	m mg/L	1	0.00200

### Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory: Lubbock

Analysis: Cd. Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RRSample Preparation: Prep Batch: 44004 2008-08-11 Prepared By: KV

# Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory: Lubbock

Analysis: Co. Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RRSample Preparation: Prep Batch: 44004 2008-08-11 Prepared By: KV

# Sample: 170067 - HLSF-0085-HMW-014-0808

 $Laboratory {:} \quad Lubbock$ 

Analysis: Cr, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RRPrep Batch: Sample Preparation: Prepared By: 44004 2008-08-11 KV

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 7 of 352

65 WORK ORDER 7, 2000 WORK ORDER 1

Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 51313 2008-08-11 Analyzed By: RRPrep Batch: 44004 Sample Preparation: 2008-08-11 Prepared By: KV

RL

Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/AQC Batch: Analyzed By:  $\mathrm{TP}$ 51771Date Analyzed: 2008-08-25 Prep Batch: 44397 Sample Preparation: 2008-08-25 Prepared By: TP

RL

Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Ni, Total S 6010B QC Batch: Date Analyzed: Analyzed By: RR51313 2008-08-11 Prep Batch: 44004 Sample Preparation: 2008-08-11 Prepared By: KV

RL

Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory: Lubbock

Analysis: Pb, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RRPrep Batch: 44004 Sample Preparation: 2008-08-11 Prepared By: KV

RL

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 8 of 352 HELSTF GROUNDWATER

Laboratory:	Lubbock				
Analysis:	Sb, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51313	Date Analyzed:	2008-08-11	Analyzed By:	RR
Prep Batch:	44004	Sample Preparation:	2008-08-11	Prepared By:	KV
		$\mathrm{RL}$			
Parameter	Flag	Result	Units	Dilution	RI
Total Antim	ony	< 0.0200	mg/L	1	0.0200
Sample: 17	70067 - HLSF-0085-HN	IW-014-0808			
Laboratory:	Lubbock				
Analysis:	Se, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51313	Date Analyzed:	2008-08-11	Analyzed By:	RR
Prep Batch:	44004	Sample Preparation:	2008-08-11	Prepared By:	KV
		$\operatorname{RL}$			
Parameter	Flag	Result	Units	Dilution	RI
Total Seleniı	<u>ım</u>	0.233	$\mathrm{mg/L}$	1	0.0200
Sample: 17	70067 - HLSF-0085-HN	IW-014-0808			
-	_	1W-014-0808			
Laboratory:		<b>1W-014-0808</b> Analytical Method:	S 6010B	Prep Method:	S 3010A
Laboratory: Analysis:	Lubbock		S 6010B 2008-08-11	Prep Method: Analyzed By:	S 3010 <i>A</i> RR
Laboratory: Analysis: QC Batch:	Lubbock Sn, Total	Analytical Method:		-	
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Sn, Total 51313 44004	Analytical Method: Date Analyzed: Sample Preparation: RL	2008-08-11 2008-08-11	Analyzed By: Prepared By:	KV
Laboratory: Analysis: QC Batch: Prep Batch: Parameter	Lubbock Sn, Total 51313	Analytical Method: Date Analyzed: Sample Preparation: RL Result	2008-08-11 2008-08-11 Units	Analyzed By: Prepared By: Dilution	RR KV
Laboratory: Analysis: QC Batch:	Lubbock Sn, Total 51313 44004	Analytical Method: Date Analyzed: Sample Preparation: RL	2008-08-11 2008-08-11	Analyzed By: Prepared By:	RR KV
Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Tin	Lubbock Sn, Total 51313 44004  Flag	Analytical Method: Date Analyzed: Sample Preparation: RL Result <0.100	2008-08-11 2008-08-11 Units	Analyzed By: Prepared By: Dilution	RR KV
Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Tin  Sample: 17	Lubbock Sn, Total 51313 44004  Flag	Analytical Method: Date Analyzed: Sample Preparation: RL Result <0.100	2008-08-11 2008-08-11 Units	Analyzed By: Prepared By: Dilution	RR KV
Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Tin  Sample: 17 Laboratory:	Lubbock Sn, Total 51313 44004  Flag  70067 - HLSF-0085-HN Lubbock	Analytical Method: Date Analyzed: Sample Preparation: RL Result <0.100	2008-08-11 2008-08-11 Units mg/L	Analyzed By: Prepared By:  Dilution  1	RR KV
Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Tin	Lubbock Sn, Total 51313 44004  Flag	Analytical Method: Date Analyzed: Sample Preparation: RL Result <0.100	2008-08-11 2008-08-11 Units	Analyzed By: Prepared By: Dilution	RR KV

Sample Preparation:

Result

< 0.0500

Flag

RL

2008-08-11

Units

mg/L

Prepared By:

Dilution

KV

RL

0.0500

Prep Batch: 44004

Parameter

Total Thallium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 9 of 352

HELSTF GROUNDWATER

Sample: 170067 - HLSF-0085-HMW-014-0808

Lubbock Laboratory:

Analysis: V, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 2008-08-11 51313 Analyzed By: RRPrep Batch: 44004 Sample Preparation: 2008-08-11 Prepared By: KV

RL

Dilution Parameter Flag Result Units RLTotal Vanadium < 0.00500 0.00500 mg/L

Sample: 170067 - HLSF-0085-HMW-014-0808

Laboratory: Lubbock

Analysis: Zn, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51313 Date Analyzed: Analyzed By: 2008-08-11 RRPrep Batch: 44004 Sample Preparation: 2008-08-11 Prepared By: KV

RL

Result Parameter Flag Units Dilution RLTotal Zinc < 0.00500mg/L0.00500

Sample: 170168 - HLSF-0085-HMW-055-0808

Laboratory: Lubbock

Analytical Method: Analysis: Ag, Total S 6010B Prep Method: N/AQC Batch: 51427 Date Analyzed: Analyzed By: RR2008-08-14 Prep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

RL

Parameter Flag Result Units Dilution RLTotal Silver < 0.005000.00500 mg/L

Sample: 170168 - HLSF-0085-HMW-055-0808

Laboratory: Lubbock

Prep Method: S 3010A Analysis: As, Total Analytical Method: S 6010B QC Batch: 51427Date Analyzed: 2008-08-14 Analyzed By: RRPrep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

RL

Parameter Flag Dilution Result Units RLTotal Arsenic < 0.0100 mg/L0.0100 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 10 of 352 65 HELSTF GROUNDWATER

Laboratory:	Lubbock					
Analysis:	Ba, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	Rl
Total Bariun	1		0.00800	m mg/L	1	0.0050
Sample: 17	0168 - HLS	F-0085-HM	W-055-0808			
Laboratory:	Lubbock					
${f A}$ nalysis:	Be, Total		Analytical Method:	S 6010B	Prep Method:	S 3010
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			RL			
Parameter		Flag	Result	Units	Dilution	R.
Total Berylli	um		< 0.00200	m mg/L	1	0.0020
Sample: 17	0168 - HLS	F-0085-HM	W-055-0808			
Laboratory:	Lubbock		A 1 . 1 1 1 1 1 1	C 401.0D	D 16-1-1	0.0010
Analysis:	Cd, Total		Analytical Method:	S 6010B	Prep Method:	S 3010.
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			RL		<b>-</b>	_
_						
Parameter Total Cadmi		Flag	Result < 0.00200	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	0.0020

# Sample: 170168 - HLSF-0085-HMW-055-0808

Laboratory:	Lubbock				
Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427	Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089	Sample Preparation:	2008-08-14	Prepared By:	KV
		RL.			

		$\operatorname{RL}$			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Cobalt		< 0.00200	m mg/L	1	0.00200

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 11 of 352

65 HELSTF GROUNDWATER

Sample: 170168 - HLSF-0085-HMW-055-0808

Lubbock Laboratory: Analysis: Cr, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 51427 2008-08-14 Analyzed By: RRPrep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

RL

Sample: 170168 - HLSF-0085-HMW-055-0808

Laboratory: Lubbock
Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

Total Copper <0.00500 mg/L 1 0.00500

Sample: 170168 - HLSF-0085-HMW-055-0808

Laboratory: Lubbock Analysis: Hg, Total Analytical Method: S 7470A

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/A QC Batch: 51475 Date Analyzed: 2008-08-15 Analyzed By: TP Prep Batch: 44137 Sample Preparation: 2008-08-15 Prepared By: TP

Prep Batch: 44137 Sample Preparation: 2008-08-15 Prepared By: TP

Sample: 170168 - HLSF-0085-HMW-055-0808

Laboratory: Lubbock
Analysis: Ni, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

Prep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 12 of 352 65 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	0168 - HLS	SF-0085-HM	W-055-0808			
Laboratory:	Lubbock					
Analysis:	Pb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Lead			0.0130	m mg/L	1	0.00500
Sample: 17	0168 - HLS	SF-0085-HM	$\mathbf{W}$ -055-0808			
Laboratory:	Lubbock					
Analysis:	Sb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Antimo	ony		< 0.0200	m mg/L	1	0.0200
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Se, Total 51427 44089	SF-0085-HM	W-055-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		Flag	$\operatorname{Result}$	Units	Dilution	RL
Total Seleniu	ım		0.0570	mg/L	1	0.0200
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	C0168 - HLS  Lubbock Sn, Total 51427 44089	SF-0085-HM	W-055-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Tin		·	∠0.100	mg/L	1	0.100

mg/L

0.100

< 0.100

Total Tin

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 13 of 352 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	0168 - HL	SF-0085-HM	W-055-0808			
Laboratory:	Lubbock					
Analysis:	Tl, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	Units	$\operatorname{Dilution}$	RL
Total Thalliu	ım		< 0.0500	$\mathrm{mg/L}$	1	0.0500
Sample: 17	0168 - HL	SF-0085-HM	W-055-0808			
Laboratory:	${f Lubbock}$					
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Vanadi	$\overline{\mathrm{um}}$		0.0290	m mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	0168 - HL Lubbock Zn, Total 51427 44089	SF-0085-HM	W-055-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Zinc			0.00500	m mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	0170 - HL Lubbock Ag, Total 51427 44089	SF-0085-HM	W-010-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Silver			<0.00500	mg/L	1	0.00500

mg/L

0.00500

< 0.00500

Total Silver

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 14 of 352 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	70170 - HLS	F-0085-HM	W-010-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock As, Total 51427 44089		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	$\mathrm{RL}$
Total Arsenie	c		< 0.0100	m mg/L	1	0.0100
Sample: 17 Laboratory:	<b>70170 - HLS</b> Lubbock	F-0085-HM	W-010-0808			
Analysis:	Ba, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
To a second		T.	RL		T-11 - 1	D.F.
$\frac{\text{Parameter}}{\text{Total Bariun}}$		Flag	Result <b>0.0130</b>	$\frac{\rm Units}{\rm mg/L}$	Dilution	0.00500
Sample: 17	70170 - HLS	F-0085-HM	W-010-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Be, Total 51427 44089		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			RL			
Parameter		Flag	Result	Units	Dilution	RL
Total Berylli	um		< 0.00200	m mg/L	1	0.00200
Sample: 17	70170 - HLS	F-0085-HM	W-010-0808			
Laboratory:	Lubbock			0.001.07		Q q
Analysis:	Cd, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\mathrm{RL}$			

Result

< 0.00200

Units

mg/L

Dilution

RL

0.00200

 $\underline{\operatorname{Flag}}$ 

Parameter

Total Cadmium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 15 of 352

report Bate. October 1, 2000	Work Order: 0000020
65	HELSTF GROUNDWATER

Laboratory: Lubbock
Analysis: Co, Total Analytical Method: S 6010B Prep Method: S 3010A
QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

#### 

# Sample: 170170 - HLSF-0085-HMW-010-0808

Laboratory: Lubbock Analysis: Cr, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Analyzed By: 51427Date Analyzed: 2008-08-14 RRPrep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

#### Sample: 170170 - HLSF-0085-HMW-010-0808

Laboratory: Lubbock
Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

# Sample: 170170 - HLSF-0085-HMW-010-0808

Laboratory: Lubbock Analysis: Hg, Total Analytical Method: S 7470A

QC Batch: 51475 Date Analyzed: 2008-08-15 Analyzed By: TP
Prep Batch: 44137 Sample Preparation: 2008-08-15 Prepared By: TP

Prep Method:

N/A

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 16 of 352 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	0170 - HLS	F-0085-HM	W-010-0808			
Laboratory:	Lubbock					
Analysis:	Ni, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			m RL			
Parameter		Flag	$\operatorname{Result}$	Units	Dilution	RL
Total Nickel			< 0.00500	$\mathrm{mg/L}$	1	0.00500
Sample: 17	0170 - HLS	F-0085-HM	W-010-0808			
Laboratory:	${f Lubbock}$					
Analysis:	Pb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Lead			< 0.00500	m mg/L	1	0.00500
Sample: 17	70170 - HLS	F-0085-HM	W-010-0808			
Laboratory:	Lubbock					
Analysis:	Sb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			RL			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Antime	ony		< 0.0200	m mg/L	1	0.0200
Sample: 17	0170 - HLS	F-0085-HM	W-010-0808			
Laboratory:	${ m Lubbock}$					
Analysis:	Se, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV

RL

Units

mg/L

Dilution

RL

0.0200

Result

0.100

Flag

Parameter

Total Selenium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 17 of 352 65 HELSTF GROUNDWATER

00			neestr ono	ONDWALER		
Sample: 17	70170 - HLS	SF-0085-HMV	W-010-0808			
Laboratory:	Lubbock					
Analysis:	Sn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
1					1	
T		T.	RL	TT 1.	TO U. A.	D.I.
Parameter		Flag	Result	Units	Dilution	RL
Total Tin			< 0.100	m mg/L	1	0.100
Sample: 17	0170 - HLS	SF-0085-HMV	W-010-0808			
Laboratory:	Lubbock					
Analysis:	Tl, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
-			1 1		1	
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Thalliu	ım		< 0.0500	m mg/L	1	0.0500
C 1 1=	70.150 III.6	TE OOOF IIMI	T7 010 0000			
Sample: 17	0170 - HLS	SF-0085-HMV	W-010-0808			
Laboratory:	$\operatorname{Lubbock}$					
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010 $A$
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			m RL			
Parameter		$\operatorname{Flag}$	Result	Units	Dilution	RL
Total Vanadi	ium		0.0270	$_{ m mg/L}$	1	0.00500
				<u> </u>		
Sample: 17	70170 - HLS	SF-0085-HMV	W-010-0808			
Laboratory:	Lubbock					
Analysis:	Zn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51427		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
Trop Daten.	11000		Sample 1 Teparation.	2000 00 14	r repared by.	11.1

RL

Units

mg/L

Dilution

RL

0.00500

Result

0.00800

Flag

Parameter

Total Zinc

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 18 of 352 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	70455 - HLS	SF-0085-HM	IW-054-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ag, Total 51429 44089		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Silver			< 0.00500	m mg/L	1	0.00500
Sample: 17	70455 - HLS	SF-0085-HM	IW-054-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock As, Total 51429 44089		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter		Flag	$ m RL \ Result$	$\operatorname{Units}$	$\operatorname{Dilution}$	m RL
Total Arsenie	c	1168	<0.0100	$\frac{\rm mg/L}$	1	0.0100
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	CO455 - HLS Lubbock Ba, Total 51429 44089	SF-0085-HM	<b>1W-054-0808</b> Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter		Flag	$rac{ ext{RL}}{ ext{Result}}$	Units	Dilution	$\operatorname{RL}$
Total Bariun	n		0.00800	$_{ m mg/L}$	1	0.00500
Laboratory: Analysis: QC Batch:	Lubbock Be, Total 51429	SF-0085-HM	<b>IW-054-0808</b> Analytical Method: Date Analyzed:	S 6010B 2008-08-14	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV

 $\mathrm{RL}$ 

Units

mg/L

Dilution

RL

0.00200

Result

< 0.00200

Flag

Parameter

Total Beryllium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 19 of 352

65			HELSTF GRO	UNDWATER		
Sample: 17	0455 - HLS	SF-0085-HMV	W-054-0808			
Laboratory:	Lubbock					
Analysis:	Cd, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51429		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Cadmin	um		< 0.00200	$\mathrm{mg/L}$	1	0.00200
Sample: 17	0455 - HLS	SF-0085-HMV	W-054-0808			
Laboratory:	Lubbock					
Analysis:	Co, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	$51\dot{4}29$		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Cobalt		<u> </u>	< 0.00200	m mg/L	1	0.00200
Sample: 17	0455 - HLS	SF-0085-HMV	W-054-0808			
Laboratory:	Lubbock					
Analysis:	Cr, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51429		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			m RL			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Chrom	ium	<u> </u>	0.00500	mg/L	1	0.00500

# Sample: 170455 - HLSF-0085-HMW-054-0808

Laboratory: Analysis: QC Batch: Prep Batch:	Cu, Total 51429		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	RR
			RL			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Copper	r		< 0.00500	$\mathrm{mg/L}$	1	0.00500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 20 of 352

5 HELSTF GROUNDWATER

Sample: 170455 - HLSF-0085-HMW-054-0808

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: 51475 Date Analyzed: 2008-08-15 Prep Batch: 44137 Sample Preparation: 2008-08-15

RL

Prep Method:

Analyzed By:

Prepared By:

N/A

TP

TP

Sample: 170455 - HLSF-0085-HMW-054-0808

Laboratory: Lubbock

Analysis: Ni, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 2008-08-14Analyzed By: 51429RRPrep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

RL

Sample: 170455 - HLSF-0085-HMW-054-0808

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Pb, Total S 6010B QC Batch: 51429 Date Analyzed: Analyzed By: RR2008-08-14 Prep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

RL

Sample: 170455 - HLSF-0085-HMW-054-0808

Laboratory: Lubbock

Prep Method: S 3010A Analysis: Sb. Total Analytical Method: S 6010B QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RRPrep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

RL

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 21 of 352 65 HELSTF GROUNDWATER

65			HELSTF GRO	OUNDWATER		
Sample: 17	0455 - HLS	SF-0085-HM	W-054-0808			
Laboratory:	Lubbock					
Analysis:	Se, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	$51\dot{4}29$		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	Units	${\bf Dilution}$	RL
Total Seleniu	ım		0.0580	m mg/L	1	0.0200
C 1 1-		NT 0005 TIN				
_		SF-0085-HM	W-054-0808			
Laboratory:	Lubbock		A 1 (1 1 3 # 1 3 *	C CO10D	The state of	0.00101
Analysis:	Sn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51429		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Tin			< 0.100	m mg/L	1	0.100
Sample: 176 Laboratory: Analysis: QC Batch: Prep Batch:	0455 - HLS Lubbock Tl, Total 51429 44089	3F-0085-HM	W-054-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Thalliu	ım		< 0.0500	m mg/L	1	0.0500
Sample: 176 Laboratory: Analysis: QC Batch: Prep Batch:	<b>0455 - HLS</b> Lubbock V, Total 51429 44089	SF-0085-HM	W-054-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Vanadi	1170		0.0260	mg/L	1	0.00500

mg/L

0.00500

0.0260

Total Vanadium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 22 of 352 65 HELSTF GROUNDWATER

00			HEESTF GRO	ONDWALLIE		
Sample: 17	0455 - HLS	SF-0085-HM	[W-054-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Zn, Total 51429 44089		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		Flag	Result	Units	Dilution	RL
Total Zinc		-	0.00600	m mg/L	1	0.00500
Sample: 17	70457 - HLS	SF-0085-D F	RW-008-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ag, Total 51429 44089		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
$\frac{\text{Parameter}}{\text{Total Silver}}$		Flag	Result < 0.00500	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	0.00500
-		SF-0085-D F	RW-008-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock As, Total 51429 44089		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
To the second		TO .	RL	TT 1:	DII d	D.I.
Parameter Total Arsenie		Flag	Result < 0.0100	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	0.0100
Total Alselli	<u> </u>		₹0.0100	mg/ L	1	0.0100
Sample: 17	70457 - HLS	SF-0085-D F	RW-008-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ba, Total 51429 44089		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			

Dilution

RL

0.00500

 $\underline{\text{Flag}}$ 

Result

0.0120

 ${\bf Units}$ 

mg/L

Parameter

Total Barium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 23 of 352
65 HELSTE GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	0457 - HLS	F-0085-D R	W-008-0808			
Laboratory:	Lubbock			0.4040	D 16.1	0.00104
Analysis:	Be, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch: Prep Batch:	51429 $44089$		Date Analyzed: Sample Preparation:	2008-08-14 2008-08-14	Analyzed By: Prepared By:	RR KV
Trep Daten.	44009		sample i reparation.	2000-00-14	r repared by.	IX V
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Berylli	um		< 0.00200	m mg/L	1	0.00200
Sample: 17	0457 - HLS	F-0085-D R	W-008-0808			
Laboratory:	Lubbock					
Analysis:	Cd, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51429		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			m RL			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	$\mathrm{RL}$
Total Cadmi	um	1 148	<0.00200	mg/L	1	0.00200
Sample: 17	70457 - HLS	F-0085-D R	W-008-0808			
Laboratory:	Lubbock					
Analysis:	Co, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51429		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Cobalt			< 0.00200	m mg/L	1	0.00200
Sample: 17	0457 - HLS	F-0085-D R	W-008-0808			
Laboratory:	${f Lubbock}$					
Analysis:	Cr, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51429		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			m RL			

Result

0.0890

Units

mg/L

Dilution

RL

0.00500

Flag

Parameter

Total Chromium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 24 of 352 HELSTF GROUNDWATER

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 51429 2008-08-14 Analyzed By: RRPrep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

RL

# Sample: 170457 - HLSF-0085-D RW-008-0808

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/AQC Batch: 51475Analyzed By: TPDate Analyzed: 2008-08-15 Prep Batch: 44137 Sample Preparation: 2008-08-15 Prepared By: TP

RL

#### Sample: 170457 - HLSF-0085-D RW-008-0808

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Ni, Total S 6010B QC Batch: 51429 Date Analyzed: Analyzed By: RR2008-08-14 Prep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

RL

RL

# Sample: 170457 - HLSF-0085-D RW-008-0808

Laboratory: Lubbock

S 6010B Analysis: Pb, Total Analytical Method: Prep Method: S 3010A QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RRPrep Batch: 44089 Sample Preparation: 2008-08-14 Prepared By: KV

\_

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 25 of 352 65 HELSTF GROUNDWATER

		HEESTF GIO	ONDWALDIC		
Sample: 170457	- HLSF-0085-D R	W-008-0808			
Laboratory: Lubb Analysis: Sb, 7 QC Batch: 5142 Prep Batch: 4408	Гotal 9	Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
11cp Baten. 4400	J	pampie i reparation.	2000 00 14	r repared by.	11. 1
		$\mathrm{RL}$			
Parameter	Flag	Result	Units	Dilution	RL
Total Antimony		< 0.0200	m mg/L	1	0.0200
Sample: 170457	- HLSF-0085-D R	W-008-0808			
Laboratory: Lubb	oock				
Analysis: Se, 7		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch: 5142		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch: 4408	9	Sample Preparation:	2008-08-14	Prepared By:	KV
		$\operatorname{RL}$			
Parameter	Flag	Result	Units	Dilution	RI
Total Selenium		0.0570	m mg/L	1	0.0200
Sample: 170457  Laboratory: Lubb Analysis: Sn, 5 QC Batch: 5142 Prep Batch: 4408	Гotal 9	W-008-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-14 2008-08-14	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
<b>.</b>	T31	RL	T7 1:	TO 11	ъ.
Parameter Total Tin	Flag	Result < 0.100	Units	Dilution	0.100
	THI CE AARK D. D.		${ m mg/L}$	1	0.100
	- HLSF-0085-D R	vv -UUO-UOUO			
Laboratory: Lubb		A 1 . 13 . 13 . 1	C COLOD	TO DEFENDE	0.00101
Analysis: Tl, 7		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch: 5142 Prep Batch: 4408		Date Analyzed: Sample Preparation:	2008-08-14 2008-08-14	Analyzed By: Prepared By:	$rac{ ext{RR}}{ ext{KV}}$
110p Datem. 1100	•		2000 00 14	Tieparea By.	17.1
Danamatar	Dla m	RL	IIn:4a	Dilution	ות
Parameter Total Thallium	Flag	Result	Units	Ditution	0.050

< 0.0500

Total Thallium

mg/L

0.0500

Work Order: 8080828 HELSTF GROUNDWATER Report Date: October 7, 2008 Page Number: 26 of 352

65			HELSTF GRO	UNDWATER		
Sample: 17	0457 - HL	SF-0085-D R	W-008-0808			
Laboratory:	Lubbock					
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	$5\dot{1}429$		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			m RL			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Vanadi	um		0.0290	m mg/L	1	0.00500
Sample: 17	0457 - HL	SF-0085-D R	W-008-0808			
Laboratory:	Lubbock					
Analysis:	Zn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51429		Date Analyzed:	2008-08-14	Analyzed By:	RR
Prep Batch:	44089		Sample Preparation:	2008-08-14	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Zinc			< 0.00500	$\mathrm{mg/L}$	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	0843 - HL Lubbock Ag, Total 51617 44217	${ m SF-0085-HM}$	W-043-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		$\operatorname{Flag}$	Result	Units	Dilution	RL
Total Silver			< 0.00500	m mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	0843 - HL Lubbock As, Total 51617 44217	SF-0085-HM	W-043-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Argonic	•		<0.0100	m c / I	1	0.0100

< 0.0100

Total Arsenic

mg/L

RL0.0100 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 27 of 352 65 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	70843 - HLS	F-0085-HM	W-043-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ba, Total 51617 44217		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Barium	n		0.0100	m mg/L	1	0.00500
Sample: 17 Laboratory:	70843 - HLS Lubbock	F-0085-HM	W-043-0808			
Analysis: QC Batch: Prep Batch:	Be, Total 51617 44217		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter		Ela m	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	Dilution	$\mathrm{RL}$
Total Berylli	11m	Flag	<0.00200	$\frac{\rm mg/L}$	1	0.00200
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	CO843 - HLS  Lubbock Cd, Total 51617 44217	F-0085-HM	W-043-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
ъ.		T)	RL	TT	Du et	D.I.
Parameter Total Cadmi	11m	Flag	Result <0.00200	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	$\frac{RL}{0.00200}$
Sample: 17 Laboratory: Analysis:	0843 - HLS Lubbock Co, Total	F-0085-HM	W-043-0808 Analytical Method:	S 6010B 2008-08-20	Prep Method:	S 3010A
QC Batch: Prep Batch:	51617 44217	DI.	Date Analyzed: Sample Preparation:	2008-08-20 2008-08-19	Analyzed By: Prepared By:	RR KV

Result

< 0.00200

Units

mg/L

Dilution

RL

0.00200

Flag

Parameter

Total Cobalt

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 28 of 352

55 HELSTF GROUNDWATER

Sample: 170843 - HLSF-0085-HMW-043-0808

Laboratory: Lubbock

Analysis: Cr. Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 51617 2008-08-20 Analyzed By: RRPrep Batch: 44217 Sample Preparation: 2008-08-19 Prepared By: KV

RL

Sample: 170843 - HLSF-0085-HMW-043-0808

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51617 2008-08-20 Analyzed By: Date Analyzed: RRPrep Batch: 44217 Sample Preparation: 2008-08-19 Prepared By: KV

RL

Sample: 170843 - HLSF-0085-HMW-043-0808

Laboratory: Lubbock

Analytical Method: Analysis: Hg, Total S 7470A Prep Method: N/AQC Batch: Date Analyzed: Analyzed By: TP51771 2008-08-25 Prep Batch: 44397 Sample Preparation: 2008-08-25 Prepared By: TP

RL

Sample: 170843 - HLSF-0085-HMW-043-0808

Laboratory: Lubbock

Analysis: Ni, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RRPrep Batch: 44217 Sample Preparation: 2008-08-19 Prepared By: KV

RL

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 29 of 352 65 HELSTF GROUNDWATER

Section   Color   Co	Analyzed By: RR   RR   RR   RR   RR   RR   RR   RR
Pb, Total	Analyzed By: RR   RR   RR   RR   RR   RR   RR   RR
Pb, Total	Analyzed By: RR   RR   RR   RR   RR   RR   RR   RR
Section   Sect	Analyzed By: RR   RR   RR   RR   RR   RR   RR   RR
RL   Result   Units   Dilution	Units Dilution RL mg/L 1 0.00500  6 6010B Prep Method: S 3010A 6 008-08-20 Analyzed By: RR 6 008-08-19 Prepared By: KV  Units Dilution RL
RL	Units         Dilution         RL           mg/L         1         0.00500           6 6010B         Prep Method:         S 3010A           008-08-20         Analyzed By:         RR           008-08-19         Prepared By:         KV           Units         Dilution         RL
Flag   Result   Units   Dilution	mg/L 1 0.00500  6 6010B Prep Method: S 3010A  1008-08-20 Analyzed By: RR  1008-08-19 Prepared By: KV  Units Dilution RL
170843 - HLSF-0085-HMW-043-0808	mg/L 1 0.00500  6 6010B Prep Method: S 3010A  1008-08-20 Analyzed By: RR  1008-08-19 Prepared By: KV  Units Dilution RL
170843 - HLSF-0085-HMW-043-0808  ry: Lubbock	Prep Method: S 3010A   1008-08-20
ry: Lubbock Sb, Total Analytical Method: S 6010B Prep Method: 1: 51617 Date Analyzed: 2008-08-20 Analyzed By: 1: 6h: 44217 Sample Preparation: 2008-08-19 Prepared By:    RL     RE     Result   Units   Dilution	0008-08-20 Analyzed By: RR 0008-08-19 Prepared By: KV Units Dilution RL
ry: Lubbock Sb, Total Analytical Method: S 6010B Prep Method: 1: 51617 Date Analyzed: 2008-08-20 Analyzed By: 1: 6h: 44217 Sample Preparation: 2008-08-19 Prepared By:    RL     RE     Result   Units   Dilution	0008-08-20 Analyzed By: RR 0008-08-19 Prepared By: KV Units Dilution RL
Sb, Total	0008-08-20 Analyzed By: RR 0008-08-19 Prepared By: KV Units Dilution RL
Date Analyzed: 2008-08-20	0008-08-20 Analyzed By: RR 0008-08-19 Prepared By: KV Units Dilution RL
ch: 44217       Sample Preparation: 2008-08-19       Prepared By: 1008-08-19         RL         gr       Flag       Result       Units       Dilution         simony       <0.0200	Units Dilution RL
RL     Dilution     Result   Units   Dilution     Dilution   Dilution     Dilution   Dilution     Dilution   Dilution     Dilution   Dilution   Dilution   Dilution   Dilution   Dilution   Dilution   Dilution   Dilution     Dilution   Dilutio	Units Dilution RL
er         Flag         Result         Units         Dilution           1000         0.0200         mg/L         1           170843 - HLSF-0085-HMW-043-0808         ry: Lubbock           Se, Total         Analytical Method: S 6010B         Prep Method: S	
170843 - HLSF-0085-HMW-043-0808   ry: Lubbock   Se, Total   Analytical Method: S 6010B   Prep Method: S	
170843 - HLSF-0085-HMW-043-0808 ry: Lubbock Se, Total Analytical Method: S 6010B Prep Method:	mg/L 1 0.0200
170843 - HLSF-0085-HMW-043-0808 ry: Lubbock Se, Total Analytical Method: S 6010B Prep Method:	
ch: 44217 Sample Preparation: 2008-08-19 Prepared By:	008-08-20 Analyzed By: RR
m RL	
er Flag Result Units Dilution	Units Dilution RL
enium <b>0.0310</b> mg/L 1	mg/L 1 0.0200
er	Analytical Method: S Date Analyzed: 2 Sample Preparation: 2  RL Flag Result

mg/L

0.100

< 0.100

Total Tin

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 30 of 352 65 HELSTF GROUNDWATER

00			nelsir Gro	UNDWALER		
Sample: 17	70843 - HL	SF-0085-HM	W-043-0808			
Laboratory:	Lubbock					
Analysis:	Tl, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51617		Date Analyzed:	2008-08-20	Analyzed By:	RR
Prep Batch:	44217		Sample Preparation:	2008-08-19	Prepared By:	KV
тер Васен.	11211		pampie i reparation.	2000 00 13	Trepared By.	17. /
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Thalliu	ım		< 0.0500	m mg/L	1	0.0500
Sample: 17	0843 - HL	SF-0085-HM	W-043-0808			
Laboratory:	Lubbock					
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51617		Date Analyzed:	2008-08-20	Analyzed By:	RR
Prep Batch:	44217		Sample Preparation:	2008-08-19	Prepared By:	KV
тер васси.	11211		Sample 1 reparation.	2000 00 10	rrepared by.	11 1
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Vanadi	ium		0.0180	m mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Zn, Total 51617 44217	SF-0085-HM	W-043-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			RL			
Parameter		Flag	Result	Units	Dilution	RL
Total Zinc			< 0.00500	m mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch:	<b>10986 - HL</b> Lubbock Ag, Total 51617	SF-0085-DRV	V-017-0808  Analytical Method: Date Analyzed:	S 6010B 2008-08-20	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44217		Sample Preparation:	2008-08-19	Prepared By:	KV
			m RL			

 ${\rm Units}$ 

mg/L

Result

< 0.00500

Dilution

RL

0.00500

Flag

Parameter

Total Silver

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 31 of 352 65 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	0986 - HLS	F-0085-DRW	7- <b>017-0808</b>			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock As, Total 51617 44217		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
r					r v	
Parameter		Flag	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	Dilution	$\mathrm{RL}$
Total Arsenie	c	8	< 0.0100	m mg/L	1	0.0100
Laboratory:	Lubbock	F-0085-DRW				
Analysis: QC Batch: Prep Batch:	Ba, Total 51617 44217		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter		Flag	$rac{ ext{RL}}{ ext{Result}}$	${ m Units}$	$\operatorname{Dilution}$	m RL
Total Bariun	n	0	0.00800	mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	0986 - HLS Lubbock Be, Total 51617 44217	F-0085- <b>DRW</b>	Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
ъ.		T.	RL	TT 1.	DU	D.
Parameter Total Berylli	III N	Flag	Result <0.00200	Units	Dilution 1	$\frac{\mathrm{RL}}{0.00200}$
		F-0085-DRW		mg/L		0.00200
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Cd, Total 51617 44217		Analytical Method: Date Analyzed: Sample Preparation: RL	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathbf{n}$			

Result

< 0.00200

Units

mg/L

Dilution

RL

0.00200

 $\underline{\operatorname{Flag}}$ 

Parameter

Total Cadmium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 32 of 352

5 HELSTF GROUNDWATER

Sample: 170986 - HLSF-0085-DRW-017-0808

Laboratory: Lubbock

Analysis: Co, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 51617 2008-08-20 Analyzed By: RRPrep Batch: 44217 Sample Preparation: 2008-08-19 Prepared By: KV

RL

Sample: 170986 - HLSF-0085-DRW-017-0808

Laboratory: Lubbock

Analysis: Cr, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51617 Date Analyzed: Analyzed By: 2008-08-20 RRPrep Batch: 44217 Sample Preparation: 2008-08-19 Prepared By: KV

RL

Sample: 170986 - HLSF-0085-DRW-017-0808

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Cu, Total S 6010B QC Batch: Date Analyzed: Analyzed By: RR51617 2008-08-20 Prep Batch: 44217 Sample Preparation: 2008-08-19 Prepared By: KV

RL

Sample: 170986 - HLSF-0085-DRW-017-0808

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/AQC Batch: 517712008-08-25 Analyzed By: TPDate Analyzed: Prep Batch: 44397 Sample Preparation: 2008-08-25 Prepared By: TP

RL

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 33 of 352 65 HELSTF GROUNDWATER

Sample: 17 Laboratory:	,000 <i>e</i> 111 c					
Laboratory:	0900 - HTS	SF-0085-DRV	V-017-0808			
	Lubbock					
Analysis:	Ni, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51617		Date Analyzed:	2008-08-20	Analyzed By:	RR
Prep Batch:	44217		Sample Preparation:	2008-08-19	Prepared By:	KV
			m RL			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Nickel		-	0.0120	${ m mg/L}$	1	0.00500
Sample: 17	70986 - HLS	SF-0085-DRV	V-017-0808			
Laboratory:	Lubbock			_		
Analysis:	Pb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51617		Date Analyzed:	2008-08-20	Analyzed By:	RR
Prep Batch:	44217		Sample Preparation:	2008-08-19	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	Units	$\operatorname{Dilution}$	RL
Total Lead			< 0.00500	m mg/L	1	0.00500
	C0986 - HLS Lubbock Sb, Total 51617 44217	5F-0085-DRV		mg/L S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	0.00500 S 3010A RR KV
Sample: 17 Laboratory: Analysis: QC Batch:	Lubbock Sb, Total 51617	5F-0085-DRV	V-017-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20	Prep Method: Analyzed By:	S 3010A RR
Sample: 17 Laboratory: Analysis: QC Batch:	Lubbock Sb, Total 51617	SF-0085-DRV Flag	V-017-0808  Analytical Method: Date Analyzed:	S 6010B 2008-08-20	Prep Method: Analyzed By:	S 3010A RR

mg/L

0.0200

0.0800

Total Selenium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 34 of 352 65 HELSTF GROUNDWATER

00			HEESTI GIGO	ONDWATER		
Sample: 17	70986 - HLS	SF-0085-DRV	V-017-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Sn, Total 51617 44217		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		Flag	Result	Units	${f Dilution}$	RL
Total Tin			< 0.100	${ m mg/L}$	1	0.100
Sample: 17	70986 - HLS	SF-0085-DRV	V-01 <b>7</b> -0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Tl, Total 51617 44217		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-20 2008-08-19	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Thalliu	ım		< 0.0500	m mg/L	1	0.0500
Sample: 17 Laboratory: Analysis: QC Batch:	70986 - HLS Lubbock V, Total 51617	SF-0085-DRV	V-017-0808  Analytical Method: Date Analyzed:	S 6010B 2008-08-20	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44217		Sample Preparation:	2008-08-19	Prepared By:	KV
Parameter		Flag	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	$\operatorname{Dilution}$	m RL
Total Vanadi	ium	Triag	0.0260	mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch:	70986 - HLS Lubbock Zn, Total 51617	SF-0085-DRW	V-017-0808  Analytical Method: Date Analyzed:	S 6010B 2008-08-20	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44217		Sample Preparation:	2008-08-20	Prepared By:	KK KV
			RL			

 ${\bf Result}$ 

< 0.00500

Units

mg/L

Dilution

RL

0.00500

Flag

Parameter

Total Zinc

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 35 of 352 65 HELSTF GROUNDWATER

00			uersit gro	UNDWALER		
Sample: 17	1111 - HLSF-0	0085-HMW-	062-0808			
Laboratory:	Lubbock					
Analysis:	Ag, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV
•			-		1	
D.	Di		RL	TT '-	D'1 - 41	DI
$\frac{\text{Parameter}}{\text{Total Silver}}$	Fla	ag	Result < 0.00500	Units	Dilution	RL
Total Silver			< 0.00500	$\mathrm{mg/L}$	1	0.00500
Sample: 17	1111 - HLSF-0	0085-HMW-	062-0808			
Laboratory:	Lubbock					
Analysis:	As, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV
ľ			1 1		r	
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Arsenic	3		< 0.0100	m mg/L	1	0.0100
Sample: 17	1111 - HLSF-0	085-HMW-	062-0808			
Laboratory:	Lubbock					
Analysis:	Ba, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV
			$\mathrm{RL}$			
Parameter	I	Flag	$\operatorname{Result}$	Units	${f Dilution}$	RL
Total Barium	1		0.0100	$\mathrm{mg/L}$	1	0.00500
Sample: 17	1111 - HLSF-0	0085-HMW-	062-0808			
Laboratory:	Lubbock					
Analysis:	Be, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV
ricp Daten.	11011		Sample i Teparamon.	2000 00-22	r repared by.	17.4

RL

 $\operatorname{Units}$ 

mg/L

Dilution

RL

0.00200

Result

< 0.00200

Flag

Parameter

Total Beryllium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 36 of 352 HELSTF GROUNDWATER

				01.2 ,,1112=0		
Sample: 171	1111 - HLS	SF-0085-HMV	W-062-0808			
Laboratory:	Lubbock					
Analysis:	Cd, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Cadmiu	ım		< 0.00200	m mg/L	1	0.00200
Sample: 171	l111 - HLS	SF-0085-HMV	W-062-0808			
Laboratory:	Lubbock					
Analysis:	Co, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	${\rm Dilution}$	RL
Total Cobalt			< 0.00200	$\mathrm{mg/L}$	1	0.00200
Sample: 171	1111 - HLS	SF-0085-HMV	W-062-0808			
Laboratory:	Lubbock					
Analysis:	Cr, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	Result	Units	Dilution	RL
Total Chromi	um		0.0130	$\mathrm{mg/L}$	1	0.00500
		SF-0085-HMV	W-062-0808			
Laboratory:	Lubbock		A14:1 M-41 1	C C010D	D M (1 1	C 2010 A
Analysis:	Cu, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV

RL

 $\operatorname{Result}$ 

< 0.00500

Units

mg/L

Dilution

RL

0.00500

Flag

Parameter

Total Copper

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 37 of 352 HELSTF GROUNDWATER

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: 51771 Date Analyzed: 2008-08-25 Prep Batch: 44397 Sample Preparation: 2008-08-25

RL

Prep Method:

Analyzed By:

Prepared By:

N/A

TP

TP

# Sample: 171111 - HLSF-0085-HMW-062-0808

Laboratory: Lubbock

Analysis: Ni, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51695Date Analyzed: 2008-08-22 Analyzed By: RRPrep Batch: 44317 Sample Preparation: 2008-08-22 Prepared By: KV

RL

RL

#### Sample: 171111 - HLSF-0085-HMW-062-0808

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Pb, Total S 6010B QC Batch: 51695 Date Analyzed: Analyzed By: RR2008-08-22 Prep Batch: 44317 Sample Preparation: 2008-08-22 Prepared By: KV

### Sample: 171111 - HLSF-0085-HMW-062-0808

Laboratory: Lubbock

Sb, Total Analysis: Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51695Date Analyzed: 2008-08-22 Analyzed By: RRPrep Batch: 44317 Sample Preparation: 2008-08-22 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 38 of 352 HELSTF GROUNDWATER

00			nelsir Gno	UNDWALER		
Sample: 17	1111 - HL	SF-0085-HM	W-062-0808			
Laboratory:	Lubbock					
Analysis:	Se, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	nn KV
rrep batch:	44517		Sample Preparation:	2006-06-22	Frepared by:	K V
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Seleniu	ım		0.0700	m mg/L	1	0.0200
Sample: 17	1111 - HL	SF-0085-HM	W-062-0808			
Laboratory:	Lubbock					
Analysis:	Sn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV
ттер васси.	11011		Sample 1 reparation.	2000-00-22	r repared by.	17 V
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Tin			< 0.100	m mg/L	1	0.100
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	1111 - HL Lubbock Tl, Total 51695 44317	SF-0085-HM	W-062-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Thalliu	ım		< 0.0500	$\mathrm{mg/L}$	1	0.0500
Sample: 17	<b>1111 - HL</b> Lubbock	SF-0085-HM	W-062-0808			
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51695		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV
			m RL			

Result

0.0110

Units

mg/L

Dilution

RL

0.00500

Flag

Parameter

Total Vanadium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 39 of 352 HELSTF GROUNDWATER

Sample: 17	1111 - HLSF-0085-	HMW-062-0808			
Laboratory: Analysis: QC Batch:	Lubbock Zn, Total 51695	Analytical Method: Date Analyzed:	S 6010B 2008-08-22	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44317	Sample Preparation:	2008-08-22	Prepared By:	KV
		m RL			
Parameter	Flag	Result	Units	Dilution	RL
Total Zinc		0.00800	m mg/L	1	0.00500
Sample: 17	1300 - HLSF-0085-	HMW-008-0808			
Laboratory:	Lubbock	A 1 .	C C010D	D M (1 1	0.0010.4
Analysis: QC Batch:	Ag, Total 51695	Analytical Method: Date Analyzed:	S 6010B 2008-08-22	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44317	Sample Preparation:	2008-08-22	Prepared By:	KV
ттер васси.	44017	Sample 1 reparation.	2000-00-22	r repared by.	IX V
<b>.</b>	T)	RL	TT 1.	TO U I	ъ.
Parameter Total Silver	Flag	Result < 0.00500	$\frac{\rm Units}{\rm mg/L}$	Dilution	0.00500
	1000 777 077 0007				
Laboratory: Analysis: QC Batch:	1300 - HLSF-0085- Lubbock As, Total 51695	Analytical Method: Date Analyzed:	S 6010B 2008-08-22	Prep Method: Analyzed By:	RR
Laboratory: Analysis: QC Batch:	Lubbock As, Total	Analytical Method: Date Analyzed: Sample Preparation:			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock As, Total 51695 44317	Analytical Method: Date Analyzed: Sample Preparation: RL	2008-08-22 2008-08-22	Analyzed By: Prepared By:	RR KV
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Arsenic	Lubbock As, Total 51695 44317	Analytical Method: Date Analyzed: Sample Preparation:	2008-08-22	Analyzed By:	RR KV
Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Arsenic	Lubbock As, Total 51695 44317  Flag	Analytical Method: Date Analyzed: Sample Preparation: RL Result 0.0140	2008-08-22 2008-08-22 Units	Analyzed By: Prepared By: Dilution	RR KV
Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Arsenic Sample: 17 Laboratory:	Lubbock As, Total 51695 44317  Flag  1300 - HLSF-0085- Lubbock	Analytical Method: Date Analyzed: Sample Preparation: RL Result 0.0140  HMW-008-0808	2008-08-22 2008-08-22 Units mg/L	Analyzed By: Prepared By:  Dilution  1	RR KV RI 0.0100
Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Arsenic  Sample: 17 Laboratory: Analysis:	Lubbock As, Total 51695 44317  Flag  1300 - HLSF-0085-  Lubbock Ba, Total	Analytical Method: Date Analyzed: Sample Preparation: RL Result 0.0140  HMW-008-0808  Analytical Method:	2008-08-22 2008-08-22 Units mg/L	Analyzed By: Prepared By: Dilution  1  Prep Method:	RR KV RL 0.0100
Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Arsenic  Sample: 17 Laboratory: Analysis: QC Batch:	Lubbock As, Total 51695 44317  Flag  1300 - HLSF-0085- Lubbock	Analytical Method: Date Analyzed: Sample Preparation: RL Result 0.0140  HMW-008-0808	2008-08-22 2008-08-22 Units mg/L	Analyzed By: Prepared By:  Dilution  1	RR KV RL 0.0100
Laboratory: Analysis: QC Batch: Prep Batch:  Parameter Total Arsenic  Sample: 17  Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock As, Total 51695 44317  Flag  1300 - HLSF-0085-  Lubbock Ba, Total 51695 44317	Analytical Method: Date Analyzed: Sample Preparation:  RL Result 0.0140  HMW-008-0808  Analytical Method: Date Analyzed: Sample Preparation: RL	2008-08-22 2008-08-22 Units mg/L S 6010B 2008-08-22 2008-08-22	Analyzed By: Prepared By:  Dilution  1  Prep Method: Analyzed By: Prepared By:	RL 0.0100 S 3010A RR KV
Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Arsenic  Sample: 17 Laboratory: Analysis: QC Batch:	Lubbock As, Total 51695 44317  Flag  1300 - HLSF-0085-  Lubbock Ba, Total 51695 44317  Flag	Analytical Method: Date Analyzed: Sample Preparation:  RL Result 0.0140  HMW-008-0808  Analytical Method: Date Analyzed: Sample Preparation:	2008-08-22 2008-08-22 Units mg/L S 6010B 2008-08-22	Analyzed By: Prepared By: Dilution  1  Prep Method: Analyzed By:	RR KV RL 0.0100 S 3010A RR

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 40 of 352 HELSTF GROUNDWATER

			UNDWATER		
300 - HLSF-00	)85-HMW-0	08-0808			
Lubbock Be, Total 51695 14317	<del>-</del>	e e	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
		m RL			
]	$\operatorname{Flag}$	Result	Units	Dilution	RL
n		< 0.00200	m mg/L	1	0.00200
300 - HLSF-00	)85-HMW-0	08-0808			
Lubbock Cd, Total 11695 14317		Date Analyzed:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
1	Flag	RL Result	Units	Dilution	m RL
<u> </u>	- 146	< 0.00200		1	0.00200
300 - HLSF-00 Lubbock Co, Total 31695			S 6010B 2008-08-22	Prep Method:	S 3010A
14317		Sample Preparation:	2008-08-22	Analyzed By: Prepared By:	RR KV
		Sample Preparation:  RL  Result	2008-08-22 Units		
	1695 .4317  .00 - HLSF-00 .ubbock .dd, Total .1695 .4317  .00 - HLSF-00 .ubbock	Flag  1.4317  Flag  1.4317	Date Analyzed:   Sample Preparation:   RL   Result     N	Date Analyzed: 2008-08-22   2008-08-22   2008-08-22   2008-08-22   2008-08-22   2008-08-22   2008-08-22   2008-08-22   2008-08-22   2008-08-22   2008-08-24   2008-08-24   2008-08-22   2	1695   Date Analyzed: 2008-08-22   Analyzed By: 2008-08-22   Prepared By: 2008-08-24   Prepared By: 2008-08-24   Prepared By: 2008-08-24   Prepared By: 2008-08-24   Prepared By: 2008-08-25   Prepared By: 2008-08-25   Prepared By: 2008-08-26   Prepare

Result

0.00500

Units

mg/L

Dilution

RL

0.00500

 $\underline{\text{Flag}}$ 

Parameter

Total Chromium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 41 of 352 65 HELSTF GROUNDWATER

Sample:	171300 - HLSF-0085-HMW-008-0808

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 2008-08-22 51695 Analyzed By: RRPrep Batch: 44317Sample Preparation: 2008-08-22 Prepared By: KV

RL

### Sample: 171300 - HLSF-0085-HMW-008-0808

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/AQC Batch: 517712008-08-25 Analyzed By: TPDate Analyzed: Prep Batch: 44397 Sample Preparation: 2008-08-25 Prepared By: TP

RL

#### Sample: 171300 - HLSF-0085-HMW-008-0808

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Ni, Total S 6010B QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RRPrep Batch: 44317 Sample Preparation: 2008-08-22 Prepared By: KV

RL

nometer Flor

### Sample: 171300 - HLSF-0085-HMW-008-0808

Laboratory: Lubbock

S 6010B Analysis: Pb, Total Analytical Method: Prep Method: S 3010A QC Batch: 51695Date Analyzed: 2008-08-22 Analyzed By: RRPrep Batch: 44317 Sample Preparation: 2008-08-22 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 42 of 352 65 HELSTF GROUNDWATER

65		HELSTF GRO	UNDWATER		
Sample: 171300	) - HLSF-0085-HMV	V-008-0808			
•		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
		$\mathrm{RL}$			
Parameter	Flag	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Antimony		< 0.0200	$\mathrm{mg/L}$	1	0.0200
Sample: 171300	) - HLSF-0085-HMV	W-008-0808			
Laboratory: Lub	bock				
	Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch: 516		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch: 443	17	Sample Preparation:	2008-08-22	Prepared By:	KV
		m RL			
Parameter	Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Selenium		0.0500	m mg/L	1	0.0200
Laboratory: Lub		W-008-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
<b>.</b>	T.)	RL	TT 1:	DU -	DI
Parameter Total Tim	Flag	Result	Units	Dilution	RL
Total Tin		<0.100	mg/L	1	0.100
Sample: 171300	) - HLSF-0085-HMV	V-008-0808			
		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	$\operatorname{Dilution}$	m RL
Total Thallium	riag		mg/I	1	0.0500 RL

< 0.0500

Total Thallium

mg/L

0.0500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 43 of 352

65		HELSTF GRO	UNDWATER		
Sample: 17	1300 - HLSF-0	085-HMW-008-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock V, Total 51695 44317	Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
		m RL			
Parameter		Flag Result	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Vanadi	um	0.0240	m mg/L	1	0.00500
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Zn, Total 51695 44317	085-HMW-008-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter	$\operatorname{Fla}$	$ m RL \ Result$	Units	$\mathbf{Dilution}$	$\operatorname{RL}$
Total Zinc		0.00800	mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	1303 - HLSF-0 Lubbock Ag, Total 51695 44317	085-HMW-034-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
T	E)	RL	TT 1.	D.1	DI
Parameter Total Silver	Fla		Units	Dilution	RL
	1303 - HLSF-0	<0.00500 085-HMW-034-0808	m mg/L	1	0.00500
Laboratory: Analysis: QC Batch:	Lubbock As, Total 51695	Analytical Method: Date Analyzed:	S 6010B 2008-08-22	Prep Method: Analyzed By:	S 3010A RR

Sample Preparation:

RL

Result

< 0.0100

2008-08-22

Units

mg/L

Prepared By:

Dilution

KV

RL

0.0100

Prep Batch: 44317

Flag

Parameter

Total Arsenic

Report Date: October 7, 2008	Work Order: 8080828 HELSTF GROUNDWATER	Page Number: 44 of 352
Sample: 171303 - HLSF-0085-H	$\mathrm{IMW} ext{-}034 ext{-}0808$	
Laboratory: Lubbock Analysis: Ba, Total	Analytical Method: S 6010B	Prep Method: S 3010A
Analysis. Da, Iotal	Analytical Method. 5 0010b	riep Method. 5 5010A

Prep Batch: 44317		Sample Preparatio	Sample Preparation: 2008-08-22		By: KV
		$\mathrm{RL}$			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Barium		0.0150	$\mathrm{mg/L}$	1	0.00500

2008-08-22

Analyzed By: RR

0.00200

Date Analyzed:

Laboratory:	Lubbock				
Analysis:	Be, Total	Analytical Method:	S 6010B	Prep Method:	$S_{3010A}$
QC Batch:	51695	Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317	Sample Preparation:	2008-08-22	Prepared By:	KV
		RI.			

		$\kappa_{\rm L}$			
Parameter	$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Beryllium		< 0.00200	$\mathrm{mg/L}$	1	0.00200

# Sample: 171303 - HLSF-0085-HMW-034-0808

Sample: 171303 - HLSF-0085-HMW-034-0808

Laboratory: Analysis: QC Batch: Prep Batch:	Cd, Total 51695	Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	RR
		$\operatorname{RL}$			
					TO T

Parameter	Flag	Result	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Cadmium		< 0.00200	m mg/L	1	0.00200

### Sample: 171303 - HLSF-0085-HMW-034-0808

QC Batch:

Total Cobalt

51695

Laboratory: Analysis: QC Batch: Prep Batch:	Co, Total 51695		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	RR
			m RL			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL

mg/L

< 0.00200

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 45 of 352

55 HELSTF GROUNDWATER

Sample: 171303 - HLSF-0085-HMW-034-0808

Lubbock Laboratory: Analysis: Cr. Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 2008-08-22 51695 Analyzed By: RRPrep Batch: 44317Sample Preparation: 2008-08-22 Prepared By: KV

RL

Sample: 171303 - HLSF-0085-HMW-034-0808

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 516952008-08-22 Analyzed By: Date Analyzed: RRPrep Batch: 44317 Sample Preparation: 2008-08-22 Prepared By: KV

RL

Sample: 171303 - HLSF-0085-HMW-034-0808

Laboratory: Lubbock

Analytical Method: Analysis: Hg, Total S 7470A Prep Method: N/AQC Batch: Date Analyzed: Analyzed By: TP51771 2008-08-25 Prep Batch: 44397 Sample Preparation: 2008-08-25 Prepared By: TP

RL

Sample: 171303 - HLSF-0085-HMW-034-0808

Laboratory: Lubbock

Ni, Total Analysis: Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RRPrep Batch: 44317 Sample Preparation: 2008-08-22 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 46 of 352 65 HELSTF GROUNDWATER

Flag Flag SF-0085-HMV	Analytical Method: Date Analyzed: Sample Preparation: RL Result <0.00500  V-034-0808  Analytical Method: Date Analyzed:	S 6010B 2008-08-22 2008-08-22 Units mg/L	Prep Method: Analyzed By: Prepared By:  Dilution  1  Prep Method:	S 3010A RR KV RL 0.00500
-	Date Analyzed: Sample Preparation:  RL Result <0.00500  V-034-0808  Analytical Method: Date Analyzed:	2008-08-22 2008-08-22 Units mg/L	Analyzed By: Prepared By:  Dilution  1	RR KV RL 0.00500
-	Date Analyzed: Sample Preparation:  RL Result <0.00500  V-034-0808  Analytical Method: Date Analyzed:	2008-08-22 2008-08-22 Units mg/L	Analyzed By: Prepared By:  Dilution  1	RR KV RL 0.00500
-	Date Analyzed: Sample Preparation:  RL Result <0.00500  V-034-0808  Analytical Method: Date Analyzed:	Units mg/L S 6010B	Analyzed By: Prepared By:  Dilution  1	RL 0.00500
-	RL Result <0.00500  V-034-0808  Analytical Method: Date Analyzed:	Units mg/L S 6010B	Dilution 1	RL 0.00500
-	Result <0.00500  V-034-0808  Analytical Method: Date Analyzed:	mg/L S 6010B	1	0.00500
-	<0.00500  V-034-0808  Analytical Method: Date Analyzed:	mg/L S 6010B	1	0.00500
SF-0085-HMV	V-034-0808  Analytical Method: Date Analyzed:	S 6010B	Prep Method:	
SF-0085-HMV	Analytical Method: Date Analyzed:		Prep Method	
	Date Analyzed:		Pron Method	
	Date Analyzed:		Pren Method:	
	· ·	0000 00 00	r rep memod.	S 3010A
	a l D ''	2008-08-22	Analyzed By:	RR
	Sample Preparation:	2008-08-22	Prepared By:	KV
	RL			
Flag	Result	Units	Dilution	RL
	< 0.0200	${ m mg/L}$	1	0.0200
SF-0085-HMV	V-034-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
	$\mathrm{RL}$			
$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
	< 0.0200	m mg/L	1	0.0200
		Date Analyzed: Sample Preparation: RL Flag Result	Analytical Method: S 6010B Date Analyzed: 2008-08-22 Sample Preparation: 2008-08-22  RL Flag Result Units	Analytical Method: S 6010B Prep Method: Date Analyzed: 2008-08-22 Analyzed By: Sample Preparation: 2008-08-22 Prepared By:  RL Flag Result Units Dilution

mg/L

0.100

< 0.100

Total Tin

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 47 of 352 65 HELSTF GROUNDWATER

<del></del>			HELSIF GRO	UNDWALER		
Sample: 17	1303 - HL	SF-0085-HM	W-034-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Tl, Total 51695 44317		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-22 2008-08-22	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Thalliu	ım		< 0.0500	$\mathrm{mg/L}$	1	0.0500
Sample: 17 Laboratory: Analysis: QC Batch:	1303 - HL Lubbock V, Total 51695	SF-0085-HM	W-034-0808  Analytical Method: Date Analyzed:	S 6010B 2008-08-22	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	ĸĸ KV
r rep Daten.	44017		Sample I reparation.	2000-00-22	r repared by.	IX V
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Vanadi	ium		0.0220	mg/L	1	0.00500
Sample: 17 Laboratory:	1303 - HL Lubbock	SF-0085-HM	W-034-0808			
Analysis:	Zn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	$51\overset{'}{6}95$		Date Analyzed:	2008-08-22	Analyzed By:	RR
Prep Batch:	44317		Sample Preparation:	2008-08-22	Prepared By:	KV
			m RL			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Zinc			0.0100	$\mathrm{mg/L}$	1	0.00500
Sample: 17 Laboratory: Analysis:	1 <b>731 - HL</b> Lubbock Ag, Total	SF-0085-HM	W-033-0808  Analytical Method:	S 6010B	Prep Method:	S 3010 A
Anaiyaia.	715, 100ai		Thaty oreal wrethou.	0000000000	rep memou.	DD

Date Analyzed:

Result

< 0.00500

Sample Preparation:

RL

2008-08-26

2008-08-26

Units

mg/L

Analyzed By:

Prepared By:

Dilution

RR

KV

RL

0.00500

QC Batch:

Parameter

Total Silver

Prep Batch:

51793

44405

 $\operatorname{Flag}$ 

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 48 of 352 65 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	1731 - HLS	F-0085-HMV	V-033-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock As, Total 51793 44405		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Arsenic	c		0.0260	mg/L	1	0.0100
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	1731 - HLS Lubbock Ba, Total 51793 44405	F-0085-HMV	W-033-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
$\frac{\text{Parameter}}{\text{Total Barium}}$	2	Flag	RL Result 0.00800	Units mg/L	Dilution 1	RL 0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	1731 - HLS Lubbock Be, Total 51793 44405	F-0085-HMV	W-033-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Berylli	um		< 0.00200	m mg/L	1	0.00200
Sample: 17 Laboratory: Analysis:	1 <b>731 - HLS</b> Lubbock Cd, Total	F-0085-HMV	W-033-0808  Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch: Prep Batch:	51793 44405		Date Analyzed: Sample Preparation:	2008-08-26 2008-08-26	Analyzed By: Prepared By:	RR KV
			$\mathrm{RL}$			

Result

< 0.00200

Units

mg/L

Dilution

RL

0.00200

 $\underline{\operatorname{Flag}}$ 

Parameter

Total Cadmium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 49 of 352

65	HELSTF GROUNDWATER	r age rvain

Laboratory:	$\operatorname{Lubbock}$				
Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	$S_{3010A}$
QC Batch:	51793	Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405	Sample Preparation:	2008-08-26	Prepared By:	KV

		$\operatorname{RL}$			
Parameter	Flag	Result	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Cobalt		< 0.00200	$\mathrm{mg/L}$	1	0.00200

# Sample: 171731 - HLSF-0085-HMW-033-0808

Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Cr, Total 51793 44405		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	RR	
			$\mathrm{RL}$				
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	Units	Dilution	RL	
Total Chrom	ium		0.591	mg/L	1	0.00500	

# Sample: 171731 - HLSF-0085-HMW-033-0808

Sample: 171731 - HLSF-0085-HMW-033-0808

Total Copper		< 0.00500	m mg/L	1	0.00500
Parameter	$\operatorname{Flag}$	RL Result	$\operatorname{Units}$	$\operatorname{Dilution}$	m RL
Prep Batch:	44405	Sample Preparation:	2008-08-26	Prepared By:	KV
QC Batch:	51793	Date Analyzed:	2008-08-26	Analyzed By:	RR
Analysis:	Cu, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
Laboratory:	${ m Lubbock}$				

# Laboratory: Lubbock Analysis: Hg, Total Analytical Method: S 7470A

Analysis:	Hg, Total	Analytical Method:	S 7470A	Prep Method:	N/A
QC Batch:	51772	Date Analyzed:	2008-08-25	Analyzed By:	$\mathrm{TP}$
Prep Batch:	44397	Sample Preparation:	2008-08-25	Prepared By:	TP

Prep Batch:	44397	Sample Preparation:	2008-08-25	Prepared By	y: TP
		m RL			
Parameter	Flag	$\operatorname{Result}$	$\operatorname{Units}$	${\bf Dilution}$	$\operatorname{RL}$
Total Mercur	У	< 0.000200	m mg/L	1	0.000200

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 50 of 352 65 HELSTF GROUNDWATER

09			HELSIF GRO	UNDWATER		
Sample: 17	1731 - HLS	SF-0085-HMV	W-033-0808			
Laboratory	Lubbock					
Laboratory: Analysis:	Ni, Total		Analytical Method:	S 6010B	Prop Mothod	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Prep Method:	RR
-			v		Analyzed By:	
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Nickel			< 0.00500	m mg/L	1	0.00500
Sample: 17	1731 - HLS	SF-0085-HMV	W-033-0808			
Laboratory:	Lubbock					
Analysis:	Pb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Lead			< 0.00500	mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Sb, Total 51793 44405	SF-0085-HMV	W-033-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		Flag	$\operatorname{Result}$	Units	Dilution	RL
Total Antimo	ony		< 0.0200	m mg/L	1	0.0200
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	1731 - HLS Lubbock Se, Total 51793 44405	SF-0085-HMV	W-033-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Coloniu		<u> </u>	0.586	mæ/I	1	0.0200

mg/L

0.586

Total Selenium

0.0200

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 51 of 352 65 HELSTF GROUNDWATER

00			HELSIF GRU	UNDWALER		
Sample: 17	71731 - HL	SF-0085-HM	W-033-0808			
Laboratory:	Lubbock			0.00107		0.00101
Analysis:	Sn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Tin			< 0.100	$\mathrm{mg/L}$	1	0.100
Sample: 17	71731 - HL	SF-0085-HM	W-033-0808			
Laboratory:	Lubbock					
Analysis:	Tl, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			m RL			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Thalliu	ım		< 0.0500	$\mathrm{mg/L}$	1	0.0500
Sample: 17	1731 - HL	SF-0085-HM	W-033-0808			
Laboratory:	Lubbock					
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			m RL			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Vanadi	ium		0.0280	m mg/L	1	0.00500
Sample: 17	71731 - HL	SF-0085-HM	W-033-0808			
Laboratory:	Lubbock					_
Analysis:	Zn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			$\mathrm{RL}$			
D		To I	D h	TT **	D:1+:	DI

Dilution

RL

0.00500

Flag

Result

0.00600

Units

mg/L

Parameter

Total Zinc

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 52 of 352 65 HELSTF GROUNDWATER

09			HELSIF GRU	UNDWATER		
Sample: 17	71733 - HLS	SF-0085-HM	W-059-0808			
Laboratory:	Lubbock					
Analysis:	Ag, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			m RL			
Parameter		Flag	$\operatorname{Result}$	Units	$\operatorname{Dilution}$	RL
Total Silver			< 0.00500	m mg/L	1	0.00500
Sample: 17	1733 - HLS	SF-0085-HM	W-059-0808			
Laboratory:	Lubbock					
Analysis:	As, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			m RL			
Parameter		Flag	$\operatorname{Result}$	Units	Dilution	RL
Total Arsenie	c		0.0280	m mg/L	1	0.0100
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ba, Total 51793 44405	5F-0085-HM	Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
-			RL		D	
Parameter		Flag	Result	Units	Dilution	RL
Total Bariun	n		0.0120	m mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Be, Total 51793 44405	5F-0085-HM	Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			RL			
Th.		T31	T. 1.	T T	TD 11	T- T

 ${\bf Result}$ 

< 0.00200

 $\operatorname{Units}$ 

mg/L

Dilution

RL

0.00200

Parameter

Total Beryllium

Flag

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 53 of 352 HELSTF GROUNDWATER

F-0085-HM Flag	W-059-0808  Analytical Method: Date Analyzed: Sample Preparation: RL	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Flag	Date Analyzed: Sample Preparation:	2008-08-26	Analyzed By:	RR
Flag	m RL			
Flag				
rag	$\operatorname{Result}$	Units	${\rm Dilution}$	RL
	< 0.00200	m mg/L	1	0.00200
F-0085-HM	W-059-0808			
	Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Flao	RL Result	Units	Dilution	m RL
11000	< 0.00200	mg/L	1	0.00200
F-0085-HM	W-059-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Ela m	RL Popult	Unita	Dilution	DI
Flag				$\frac{\mathrm{RL}}{0.00500}$
	Flag	Date Analyzed: Sample Preparation:  RL Flag Result <0.00200  F-0085-HMW-059-0808  Analytical Method: Date Analyzed: Sample Preparation:  RL	F-0085-HMW-059-0808  Analytical Method: S 6010B Date Analyzed: 2008-08-26 Sample Preparation: 2008-08-26  RL Flag Result Units <0.00200 mg/L  F-0085-HMW-059-0808  Analytical Method: S 6010B Date Analyzed: 2008-08-26 Sample Preparation: 2008-08-26 RL Flag Result Units	F-0085-HMW-059-0808  Analytical Method: S 6010B Prep Method: Date Analyzed: 2008-08-26 Analyzed By: Sample Preparation: 2008-08-26 Prepared By:  RL Flag Result Units Dilution  <0.00200 mg/L 1  F-0085-HMW-059-0808  Analytical Method: S 6010B Prep Method: Date Analyzed: 2008-08-26 Analyzed By: Sample Preparation: 2008-08-26 Prepared By: RL Sample Preparation: 2008-08-26 Prepared By: RL Flag Result Units Dilution

Result

< 0.00500

 ${\rm Units}$ 

mg/L

Dilution

RL

0.00500

Flag

Parameter

Total Copper

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 54 of 352 HELSTF GROUNDWATER

Sample	171733 _	HLSF_0085_HMW_059_080	Q

Laboratory: Lubbock

Analysis:Hg, TotalAnalytical Method:S 7470AQC Batch:51772Date Analyzed:2008-08-25Prep Batch:44397Sample Preparation:2008-08-25

RL

Prep Method:

Analyzed By:

Prepared By:

N/A

TP

TP

#### Sample: 171733 - HLSF-0085-HMW-059-0808

Laboratory: Lubbock

Analysis: Ni, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51793 Date Analyzed: Analyzed By: 2008-08-26 RRPrep Batch: 44405 Sample Preparation: 2008-08-26 Prepared By: KV

RL

RL

#### Sample: 171733 - HLSF-0085-HMW-059-0808

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Pb, Total S 6010B QC Batch: 51793 Date Analyzed: Analyzed By: RR2008-08-26 Prep Batch: 44405 Sample Preparation: 2008-08-26 Prepared By: KV

### Sample: 171733 - HLSF-0085-HMW-059-0808

Laboratory: Lubbock

Analysis: Sb, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RRPrep Batch: 44405 Sample Preparation: 2008-08-26 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 55 of 352 HELSTF GROUNDWATER

00		HEESTF GRO	ONDWALER		
Sample: 171733	3 - HLSF-0085-HM	W-059-0808			
		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
1				1 0	
D.	T)	RL	TT	D'I e'	DI
Parameter Total Selenium	Flag	Result < 0.0200	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	0.0200
Total Selemani		V0.0200	mg/ L	1	0.0200
_	3 - HLSF-0085-HM	W-059-0808			
v	bock	A 1 . 135 . 1	C 4010D	D. M. J. J.	0.00104
	Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch: 517		Date Analyzed:	2008-08-26 2008-08-26	Analyzed By:	RR
Prep Batch: 444	Uə	Sample Preparation:	2008-08-20	Prepared By:	KV
		$\operatorname{RL}$			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	${\rm Dilution}$	RI
Total Tin		< 0.100	m mg/L	1	0.100
Laboratory: Lub		W-059-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
		$\mathrm{RL}$			
Parameter	Flag	Result	Units	Dilution	RL
Total Thallium		< 0.0500	m mg/L	1	0.0500
Laboratory: Lub		W-059-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
		$\operatorname{RL}$			
Parameter	Flag	Result	$\operatorname{Units}$	Dilution	RI
Total Vanadium		0.0240	mg/L	1	0.0050

mg/L

0.00500

0.0240

Total Vanadium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 56 of 352 HELSTF GROUNDWATER

09			HELSIF GRO	UNDWALER		
Sample: 17	1733 - HLS	F-0085-HM	W-059-0808			
Labanatanı	Lubbook					
Laboratory: Analysis:	Lubbock		Amalytical Mathada	S 6010B	Duan Mathadi	S 3010A
QC Batch:	Zn, Total 51793		Analytical Method: Date Analyzed:	2008-08-26	Prep Method: Analyzed By:	RR
Prep Batch:	51795 44405		Sample Preparation:	2008-08-26	Prepared By:	KV
rrep batch:	44405		Sample Preparation:	2006-06-20	Prepared by:	ΚV
			$\mathrm{RL}$			
Parameter	]	Flag	Result	Units	Dilution	RI
Total Zinc			< 0.00500	m mg/L	1	0.00500
Sample: 17	1735 - HLS	F-0085-DR	W-016-0808			
Laboratory:	Lubbock					
Analysis:	Ag, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	${\bf Dilution}$	RI
Total Silver			< 0.00500	m mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock As, Total 51793 44405	F-0085-DR	W-016-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RI
Total Arsenic	c		0.154	m mg/L	1	0.0100
Sample: 17 Laboratory: Analysis:	1 <b>735 - HLS</b> Lubbock Ba, Total	F-0085-DR	W-016-0808  Analytical Method:	S 6010B	Prep Method:	S 3010.
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			m RL			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	Rl
Total Barium	า		0.00000	mg/L	1	0.00500

0.00900

Total Barium

mg/L

0.00500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 57 of 352 65 HELSTF GROUNDWATER

Laboratory:	Lubbock					
Analysis:	Be, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			m RL			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	${\bf Dilution}$	RL
Total Berylliı	um		< 0.00200	$\mathrm{mg/L}$	1	0.00200
Sample: 17	1735 - HLS	F-0085-DRV	V-016-0808			
Laboratory:	Lubbock					
Analysis:	Cd, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			RL			
Parameter		Flag	Result	Units	Dilution	RL
Total Cadmiu	ım		< 0.00200	m mg/L	1	0.00200
Sample: 17: Laboratory: Analysis: QC Batch: Prep Batch:	1735 - HLS Lubbock Co, Total 51793 44405	F-0085-DRV	V-016-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-26 2008-08-26	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
		Flag	Result	Units	Dilution	RL
Parameter Total Cobalt			0.00400	${ m mg/L}$	1	0.00200

Analytical Method:

Sample Preparation:

RL

Result

6.32

Date Analyzed:

S 6010B

2008-08-26

2008-08-26

Units

mg/L

Prep Method: S 3010A

RR

KV

RL

0.00500

Analyzed By:

Prepared By:

Dilution

Laboratory: Lubbock

Prep Batch: 44405

Total Chromium

Cr, Total

Flag

51793

Analysis:

QC Batch:

Parameter

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 58 of 352 HELSTF GROUNDWATER

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RRPrep Batch: 44405Sample Preparation: 2008-08-26 Prepared By: KV

RL

### Sample: 171735 - HLSF-0085-DRW-016-0808

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/AQC Batch: 517722008-08-25 Analyzed By: TPDate Analyzed: Prep Batch: 44397 Sample Preparation: 2008-08-25 Prepared By: TP

RL

#### Sample: 171735 - HLSF-0085-DRW-016-0808

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Ni, Total S 6010B QC Batch: 51793 Date Analyzed: 2008 - 08 - 26Analyzed By: RRPrep Batch: 44405 Sample Preparation: 2008-08-26 Prepared By: KV

RL

RL

D. D.

 Parameter
 Flag
 Result
 Units
 Dilution
 RL

 Total Nickel
 0.317
 mg/L
 1
 0.00500

### Sample: 171735 - HLSF-0085-DRW-016-0808

Laboratory: Lubbock

S 6010B Analysis: Pb, Total Analytical Method: Prep Method: S 3010A QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RRPrep Batch: 44405 Sample Preparation: 2008-08-26 Prepared By: KV

Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	${f Dilution}$	RL
Total Lead		< 0.00500	m mg/L	1	0.00500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 59 of 352 HELSTF GROUNDWATER

09			HELSIF GRO	UNDWALER		
Sample: 17	1735 - HL	SF-0085-DRV	V-016-0808			
Laboratory	Lubbock					
Laboratory: Analysis:	Sb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	50, 10tai 51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	51795 44405		Sample Preparation:	2008-08-26	Prepared By:	nn KV
riep batch:	44400		Sample Freparation.	2000-00-20	гтерагеи Бу:	IX V
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Antimo	ony		0.163	m mg/L	1	0.0200
Sample: 17	1735 - HL	SF-0085-DRV	V-016-0808			
Laboratory:	${\it Lubbock}$					
Analysis:	Se, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			m RL			
Parameter		Flag	Result	Units	Dilution	RL
Total Seleniu	ım	1148	0.0910	$\frac{\rm mg/L}$	1	0.0200
Laboratory:	Lubbock	SF-0085-DRV				
Analysis:	Sn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Tin			< 0.100	m mg/L	1	0.100
Comple. 17	1795 III	SF-0085-DRV	V 016 0808			
		2L-0009-DW	V-U10-U0U0			
Laboratory:	Lubbock			G 00407		0 0
Analysis:	Tl, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			m RL			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Thallin	1122		<0.0500	mg/L	1	0.0500

< 0.0500

mg/L

0.0500

Total Thallium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 60 of 352 65 HELSTF GROUNDWATER

Sample: 17	1735 - HLS	SF-0085-DRV	V-016-0808			
Laboratory:	Lubbock					
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			m RL			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	${\bf Dilution}$	RL
Total Vanadi	um		0.253	m mg/L	1	0.00500
Sample: 17	1735 - HLS	SF-0085-DRV	V-016-0808			
Laboratory:	Lubbock					
Analysis:	Zn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51793		Date Analyzed:	2008-08-26	Analyzed By:	RR
Prep Batch:	44405		Sample Preparation:	2008-08-26	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RI
		1148				
Total Zinc		1 1445	0.00700	m mg/L	1	0.00500
Total Zinc	2137 - HL	SF-0085-DRV	0.00700	mg/L	1	
Total Zinc Sample: 17	2137 - HL		0.00700	mg/L	1	
Total Zinc  Sample: 17: Laboratory:	Lubbock		0.00700	mg/L S 6010B	1 Prep Method:	0.0050
Total Zinc  Sample: 17  Laboratory: Analysis:			0.00700 V-114-0808			0.0050
Total Zinc  Sample: 17  Laboratory: Analysis: QC Batch:	Lubbock Ag, Total		0.00700 V-114-0808 Analytical Method:	S 6010B	Prep Method:	0.00500 S 3010 <i>A</i>
Total Zinc  Sample: 17  Laboratory: Analysis: QC Batch:	Lubbock Ag, Total 51924		0.00700  V-114-0808  Analytical Method: Date Analyzed:	S 6010B 2008-08-29	Prep Method: Analyzed By:	0.00500 S 3010A RR
Total Zinc  Sample: 17  Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ag, Total 51924		0.00700  V-114-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-29	Prep Method: Analyzed By:	0.00500 S 3010A RR KV
Total Zinc	Lubbock Ag, Total 51924	SF-0085-DRV	0.00700  V-114-0808  Analytical Method: Date Analyzed: Sample Preparation: RL	S 6010B 2008-08-29 2008-08-29	Prep Method: Analyzed By: Prepared By:	0.00500 S 3010A RR
Total Zinc  Sample: 17  Laboratory: Analysis: QC Batch: Prep Batch: Prarameter Total Silver	Lubbock Ag, Total 51924 44510	SF-0085-DRV	0.00700  V-114-0808  Analytical Method: Date Analyzed: Sample Preparation:  RL Result <0.00500	S 6010B 2008-08-29 2008-08-29 Units	Prep Method: Analyzed By: Prepared By:	0.00500 S 3010A RR KV
Total Zinc  Sample: 17  Laboratory: Analysis: QC Batch: Prep Batch: Pranmeter Total Silver	Lubbock Ag, Total 51924 44510	SF-0085-DRV	0.00700  V-114-0808  Analytical Method: Date Analyzed: Sample Preparation:  RL Result <0.00500	S 6010B 2008-08-29 2008-08-29 Units	Prep Method: Analyzed By: Prepared By:	0.00500 S 3010A RR KV
Total Zinc  Sample: 17  Laboratory: Analysis: QC Batch: Prep Batch: Pranmeter  Total Silver  Sample: 17  Laboratory:	Lubbock Ag, Total 51924 44510  2137 - HL	SF-0085-DRV	0.00700 V-114-0808  Analytical Method: Date Analyzed: Sample Preparation: RL Result <0.00500	S 6010B 2008-08-29 2008-08-29 Units mg/L	Prep Method: Analyzed By: Prepared By: Dilution	0.00500 S 3010A RR KV
Total Zinc  Sample: 17  Laboratory: Analysis: QC Batch: Prep Batch: Prarameter Total Silver	Lubbock Ag, Total 51924 44510 2137 - HL	SF-0085-DRV	0.00700  V-114-0808  Analytical Method: Date Analyzed: Sample Preparation:  RL Result <0.00500	S 6010B 2008-08-29 2008-08-29 Units	Prep Method: Analyzed By: Prepared By:	0.00500 S 3010A RR KV

RL

Result

< 0.0100

Units

mg/L

Dilution

RL 0.0100

Flag

Parameter

Total Arsenic

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 61 of 352 65 HELSTF GROUNDWATER

09			nelsir Gno	UNDWALER		
Sample: 17	2137 - HLS	F-0085-DRV	W-114-0808			
Laboratory:	Lubbock					
Analysis:	Ba, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
F			~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		F J ·	
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Bariun	n		0.00700	m mg/L	1	0.00500
Sample: 17	2137 - HLS	F-0085-DRV	W-114-0808			
Laboratory:	Lubbock					
Analysis:	Be, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
_			RL			
Parameter		Flag	Result	Units	Dilution	RL
Total Berylli	um		< 0.00200	$\mathrm{mg/L}$	1	0.00200
Sample: 17	2137 - HLS	F-0085-DRV	N-114-0808			
Laboratory:	Lubbock					
Analysis:	Cd, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Cadmi	um		< 0.00200	m mg/L	1	0.00200
Sample: 17	2137 - HLS	F-0085-DRV	W-114-0808			
Laboratory:	Lubbock					
Analysis:	Co, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	$\frac{51924}{44510}$		Sample Preparation:	2008-08-29	Analyzed By: Prepared By:	KK KV
r rep batch:	44910		sample r reparation:	4000-00-49	r repared By:	IV A

RL

Units

mg/L

Dilution

RL

0.00200

Result

< 0.00200

Flag

Parameter

Total Cobalt

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 62 of 352 HELSTF GROUNDWATER

Laboratory: Lubbock

Analysis: Cr. Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 51924 2008-08-29 Analyzed By: RRPrep Batch: 44510 Sample Preparation: 2008-08-29 Prepared By: KV

RL

### Sample: 172137 - HLSF-0085-DRW-114-0808

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 519242008-08-29 Analyzed By: Date Analyzed: RRPrep Batch: 44510 Sample Preparation: 2008-08-29 Prepared By: KV

RL

#### Sample: 172137 - HLSF-0085-DRW-114-0808

Laboratory: Lubbock

Analytical Method: Analysis: Hg, Total S 7470A Prep Method: N/ATPQC Batch: 52085 Date Analyzed: Analyzed By: 2008-09-04 Prep Batch: 44653 Sample Preparation: 2008-09-04 Prepared By: TP

RL

### Sample: 172137 - HLSF-0085-DRW-114-0808

Laboratory: Lubbock

Analysis: Ni, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RRPrep Batch: 44510 Sample Preparation: 2008-08-29 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 63 of 352 HELSTF GROUNDWATER

00			HELSTI GRO	ONDWATER		
Sample: 17	2137 - HL	SF-0085-DRV	V-114-0808			
Laboratory:	Lubbock					
Analysis:	Pb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
Trop Baren.	11010		bampie i reparation	2000 00 20	Tropurou By.	11 ,
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Lead			< 0.00500	m mg/L	1	0.00500
Sample: 17	2137 - HL	SF-0085-DRV	V-114-0808			
Laboratory:	Lubbock					
Analysis:	Sb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
ľ			1 1		1 /	
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Antimo	ony		0.0480	m mg/L	1	0.0200
Sample: 17	72137 - HL	SF-0085-DRV	V-114-0808			
Laboratory:	Lubbock					
Analysis:	Se, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
Trop Baron.	11010		bumpie i reperectori.	2000 00 20	rioparoa By.	
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Seleniu	ım		0.144	m mg/L	1	0.0200
-		SF-0085-DRV	V-114-0808			
Laboratory:	Lubbock		A 1 . 13 . 13 . 1	C COLOD	TS 3.5.1.1	C 9010 1
Analysis:	Sn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
			$\operatorname{RL}$			
ъ.		T)	TOL	TT */	D'1 '	DT

Flag

Result

< 0.100

 ${\bf Units}$ 

mg/L

Dilution

RL

0.100

Parameter

Total Tin

Work Order: 8080828Report Date: October 7, 2008 Page Number: 64 of 352HELSTF GROUNDWATER

00			nelstr Gno	UNDWALER		
Sample: 17	2137 - HL	SF-0085-DRV	V-114-0808			
Laboratory:	Lubbock					
Analysis:	Tl, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
Trep Baten.	11010		pampie i reparation.	2000 00 20	Trepared By.	11 1
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Thalliu	ım		< 0.0500	$\mathrm{mg/L}$	1	0.0500
Sample: 17	79197 HI	SF-0085-DRV	V 114 0808			
Sample. 17	2131 - IIL	31-0003-DIC	V-114-0000			
Laboratory:	$\operatorname{Lubbock}$					
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
			m RL			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Vanadi	ium		0.0280	$\mathrm{mg/L}$	1	0.00500
Sample: 17	2137 - HL	${f SF-0085-DRV}$	V-114-0808			
Laboratory:	Lubbock					
Analysis:	Zn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
			D.I.			
Parameter		Flag	$rac{ ext{RL}}{ ext{Result}}$	Units	Dilution	RL
Total Zinc		riag	<0.00500	mg/L	1	$\frac{\kappa_{\rm L}}{0.00500}$
			<u> </u>	mg/ L	1	0.00000
Sample: 17	2139 - HL	SF-0085-DRV	V-014-0808			
Laboratory:	Lubbock					
Analysis:	Ag, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	Ag, 10tal 51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
QC Datch:	31924		Date Anaryzed:	2000-00-29	Anaryzed by:	nn w

Result

< 0.00500

Sample Preparation:

RL

2008-08-29

Units

mg/L

KV

RL

0.00500

Prepared By:

Dilution

 $\operatorname{Flag}$ 

Prep Batch: 44510

Parameter

Total Silver

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 65 of 352 65 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	2139 - HLS	F-0085-DRW	V-014-0808			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock As, Total 51924 44510		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-29 2008-08-29	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		Flag	Result	Units	Dilution	RL
Total Arsenic	<u>c</u>		0.0320	m mg/L	1	0.0100
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	<b>2139 - HLS</b> Lubbock Ba, Total 51924 44510	F-0085-DRW	V-014-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-29 2008-08-29	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
$\frac{\text{Parameter}}{\text{Total Barium}}$	1	Flag	RL Result 0.00700	$\begin{array}{c} \rm Units \\ \rm mg/L \end{array}$	Dilution	RL 0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	<b>2139 - HLS</b> Lubbock Be, Total 51924 44510	F-0085-DRW	V-014-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-29 2008-08-29	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
•			$ m_{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Berylli	um		< 0.00200	m mg/L	1	0.00200
Sample: 17 Laboratory: Analysis: QC Batch:	<b>2139 - HLS</b> Lubbock Cd, Total 51924	F-0085-DRW	V-014-0808  Analytical Method: Date Analyzed:	S 6010B 2008-08-29	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV KV
			$\mathrm{RL}$			

Result

< 0.00200

Units

mg/L

Dilution

RL

0.00200

Flag

Parameter

Total Cadmium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 66 of 352 HELSTF GROUNDWATER

<del></del>			nelsir Gno	UNDWATER		
Sample: 17	2139 - HLS	F-0085-DRW	7-014-0808			
Laboratory:	Lubbock					
Analysis:	Co, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
			m RL			
Parameter		Flag	Result	Units	Dilution	$\mathrm{RL}$
Total Cobalt		8	< 0.00200	m mg/L	1	0.00200
Sample: 17	2139 - HLS	F-0085-DRW	7-014-0808			
Laboratory:	Lubbock					
Analysis:	Cr, Total		Analytical Method:	S 6010B	Prep Method:	S~3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Chrom	ium		2.72	$\mathrm{mg/L}$	1	0.00500
						_
Sample: 17	2139 - HLS	F-0085-DRW	7-014-0808			
Laboratory:	Lubbock					
Analysis:	Cu, Total		Analytical Method:	S 6010B	Prep Method:	$S_{3010A}$
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Copper	r	<u> </u>	0.0100	m mg/L	1	0.00500
a 1 4-		- 000K - DDIII				
Sample: 17	2139 - HLS	F-0085-DRW	7-014-0808			
Laboratory:	Lubbock					
Analysis:	Hg, Total		Analytical Method:		Prep Meth	,
QC Batch:	52085		Date Analyzed:	2008-09-04	Analyzed I	-
Prep Batch:	44653		Sample Preparation	n: 2008-09-04	Prepared B	By: TP

RL

Result

< 0.000200

Units

mg/L

Dilution

RL

0.000200

Flag

Parameter

Total Mercury

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 67 of 352 65 HELSTF GROUNDWATER

Sample: 17						
	'2139 - HLS	F-0085-DRV	V-014-0808			
Laboratory:	Lubbock					
Analysis:	Ni, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
			m RL			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Nickel		<u> </u>	0.0840	m mg/L	1	0.00500
Sample: 17	72139 - HLS	F-0085-DRV	V-014-0808			
Laboratory:	Lubbock					
Analysis:	Pb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924		Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510		Sample Preparation:	2008-08-29	Prepared By:	KV
			m RL			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Lead			< 0.00500	m mg/L	1	0.00500
Sample, 17	2139 - HLS	E OOSE DDV				
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Sb, Total 51924 44510	F-0089-DRV	V-014-0808  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-08-29 2008-08-29	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Laboratory: Analysis: QC Batch:	Lubbock Sb, Total 51924	F-0083-DKV	Analytical Method: Date Analyzed:	2008-08-29	Analyzed By:	RR
Laboratory: Analysis: QC Batch:	Lubbock Sb, Total 51924	Flag	Analytical Method: Date Analyzed: Sample Preparation:	2008-08-29	Analyzed By:	RR

mg/L

0.0200

0.136

Total Selenium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 68 of 352 HELSTF GROUNDWATER

Sample: 17	2139 - HLSF-0085-	DRW-014-0808			
Laboratory:	Lubbock				
Analysis:	Sn, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924	Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510	Sample Preparation:	2008-08-29	Prepared By:	KV
		m RL			
Parameter	Flag	Result	Units	Dilution	RL
Total Tin	0	< 0.100	mg/L	1	0.100
Sample: 17	2139 - HLSF-0085-1	DRW-014-0808			
Laboratory:	Lubbock				
Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924	Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510	Sample Preparation:	2008-08-29	Prepared By:	KV
		m RL			
Parameter	Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Thalliu		< 0.0500	$\mathrm{mg/L}$	1	0.0500
Sample: 17	2139 - HLSF-0085-1	DRW-014-0808			
Laboratory:	Lubbock				
Analysis:	V, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924	Date Analyzed:	2008-08-29	Analyzed By:	RR
Prep Batch:	44510	Sample Preparation:	2008-08-29	Prepared By:	KV
		m RL			
Parameter	Flag		Units	Dilution	RL
Total Vanadi		0.0310	m mg/L	1	0.00500
Sample: 17	2139 - HLSF-0085-1	DRW-014-0808			
Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	51924	Date Analyzed:	2008-08-29	Analyzed By:	RR
D D. 4 . l.	4.451.0	Cl- D+:	2000 00 20	D 1D	TZ 3.7

Sample Preparation: 2008-08-29

 ${\bf Units}$ 

mg/L

RL

Result

< 0.00500

Prepared By:

Dilution

KV

RL

0.00500

Prep Batch: 44510

Flag

Parameter

Total Zinc

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 69 of 352 65 HELSTF GROUNDWATER

00			nelbir Gro	UNDWATER		
Sample: 17	2467 - HLS	SF-0085-HM	IW-053-0808			
Laboratory:	Lubbock					
Analysis:	Ag, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52016		Date Analyzed:	2008-09-03	Analyzed By:	RR
Prep Batch:	44581		Sample Preparation:	2008-09-03	Prepared By:	KV
1			1 1		ı	
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Silver			< 0.00500	$\mathrm{mg/L}$	1	0.00500
Sample: 17	2467 - HLS	SF-0085-HM	IW-053-0808			
Laboratory:	Lubbock					
Analysis:	As, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52016		Date Analyzed:	2008-09-03	Analyzed By:	RR
Prep Batch:	44581		Sample Preparation:	2008-09-03	Prepared By:	KV
•					1	
_			RL			
Parameter		Flag	Result	Units	Dilution	RL
Total Arsenie	c		< 0.0100	mg/L	1	0.0100
a 1		T 000 F TT	TTT 0 K0 0000			
Sample: 17	2467 - HLS	SF-0085-H.M	IW-053-0808			
Laboratory:	$\operatorname{Lubbock}$					
Analysis:	Ba, Total		Analytical Method:	$S_{6010B}$	Prep Method:	S 3010A
QC Batch:	52016		Date Analyzed:	2008-09-03	Analyzed By:	RR
Prep Batch:	44581		Sample Preparation:	2008-09-03	Prepared By:	KV
			DI			
Parameter		Flag	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	Dilution	$\mathrm{RL}$
Total Bariun	0	riag	<0.00500	$\frac{\rm mg/L}$	1	0.00500
Total Darrun	.11		<u> </u>	mg/L	1	0.00000
Commiss 17	'9 <i>467</i> III 6	TE OOSE IIIM	1337 NEO NONO			
sample: 17	4401 - HLS	or-uuð 5-H M	IW-053-0808			
Laboratory:	Lubbock					
Analysis:	Be, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A

Date Analyzed:

Sample Preparation: 2008-09-03

 $\mathrm{RL}$ 

Result

< 0.00200

2008-09-03

Units

mg/L

Analyzed By:

Prepared By:

Dilution

RR

KV

RL

0.00200

QC Batch:

 ${\bf Parameter}$ 

Total Beryllium

Prep Batch: 44581

52016

 $\operatorname{Flag}$ 

Report Date $65$	: October 7, 2008		er: 8080828 DUNDWATER	Page Number	: 70 of 352
Sample: 17	2467 - HLSF-008	85-HMW-053-0808			
Laboratory:	Lubbock				
Analysis:	Cd, Total	Analytical Method:	$S_{6010B}$	Prep Method:	S 3010A
QC Batch:	52016	Date Analyzed:	2008-09-03	Analyzed By:	RR
Prep Batch:	44581	Sample Preparation	: 2008-09-03	Prepared By:	KV
		m RL			
Parameter	F	lag Result	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Cadmi	um	< 0.00200	m mg/L	1	0.00200

Sample:	172467 -	HLSF-0085-HMW-053-0808
---------	----------	------------------------

Laboratory:	Lubbock				
Analysis:	Co, Total	Analytical Method:	$S_{6010B}$	Prep Method:	$S_{3010A}$
QC Batch:	52016	Date Analyzed:	2008-09-03	Analyzed By:	RR
Prep Batch:	44581	Sample Preparation:	2008-09-03	Prepared By:	KV
		$\operatorname{RL}$			
Parameter	Flag	${f Result}$	$\operatorname{Units}$	Dilution	RL
Total Cobalt		< 0.00200	m mg/L	1	0.00200

# Sample: 172467 - HLSF-0085-HMW-053-0808

Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Cr, Total 52016 44581		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-03 2008-09-03	Prep Method: Analyzed By: Prepared By:	RR
			$\mathrm{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Chrom	ium		< 0.00500	m mg/L	1	0.00500

# Sample: 172467 - HLSF-0085-HMW-053-0808

Total Copper	ſ		< 0.00500	m mg/L	1	0.00500
Parameter		Flag	RL Result	$\operatorname{Units}$	Dilution	m RL
Prep Batch:	44581		Sample Preparation:	2008-09-03	Prepared By:	KV
QC Batch:	52016		Date Analyzed:	2008-09-03	Analyzed By:	RR
Analysis:	Cu, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
Laboratory:	Lubbock					

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 71 of 352

5 HELSTF GROUNDWATER

Sample: 172467 - HLSF-0085-HMW-053-0808

Laboratory: Lubbock

Analytical Method: Analysis: Hg, Total S 7470A Prep Method: N/AQC Batch: Date Analyzed: TP52084 2008-09-04 Analyzed By: Prep Batch: 44653Sample Preparation: 2008-09-04 Prepared By: TP

RL

Sample: 172467 - HLSF-0085-HMW-053-0808

Laboratory: Lubbock

Analysis: Ni, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 2008-09-03 Analyzed By: 52016 RRPrep Batch: 44581 Sample Preparation: 2008-09-03 Prepared By: KV

RL

RL

Sample: 172467 - HLSF-0085-HMW-053-0808

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Pb, Total S 6010B QC Batch: 52016 Date Analyzed: Analyzed By: RR2008-09-03 Prep Batch: 44581 Sample Preparation: 2008-09-03 Prepared By: KV

Sample: 172467 - HLSF-0085-HMW-053-0808

Laboratory: Lubbock

Sb, Total Analysis: Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RRPrep Batch: 44581 Sample Preparation: 2008-09-03 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 72 of 352

65	HELSTF GROUNDWATER	r age rvumber. 72 or 352
Sample: 172467 - HLSF-0085-E	${ m HMW}$ -053-0808	
Laboratory: Lubbock		
Analysis: Se, Total	Analytical Method: S 6010B	Prep Method: S 3010A

Analysis: Se, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR Prep Batch: 44581 Sample Preparation: 2008-09-03 Prepared By: KV

Parameter Flag Result Units Dilution RL
Total Selenium 0.534 mg/L 1 0.0200

# Sample: 172467 - HLSF-0085-HMW-053-0808

Laboratory:	Lubbock				
Analysis:	Sn, Total	Analytical Method:	S 6010 $B$	Prep Method:	S~3010A
QC Batch:	52016	Date Analyzed:	2008-09-03	Analyzed By:	RR
Prep Batch:	44581	Sample Preparation:	2008-09-03	Prepared By:	KV
		RL			
		<del></del>			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	$\operatorname{RL}$
Total Tin		< 0.100	m mg/L	1	0.100

### Sample: 172467 - HLSF-0085-HMW-053-0808

Laboratory: Lubbock Analysis: Tl, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RRPrep Batch: 44581Sample Preparation: 2008-09-03 Prepared By: KVRL

### Sample: 172467 - HLSF-0085-HMW-053-0808

Laboratory: Lubbock S 6010B Analysis: V, Total Analytical Method: Prep Method: S 3010A QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RRPrep Batch: 44581Sample Preparation: 2008-09-03 Prepared By: KV

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 73 of 352 65 HELSTF GROUNDWATER

Laboratory:	$\operatorname{Lubbock}$					
Analysis:	Zn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52016		Date Analyzed:	2008-09-03	Analyzed By:	RR
Prep Batch:	44581		Sample Preparation:	2008-09-03	Prepared By:	KV
			$\mathrm{RL}$			
Parameter	$\mathbf{F}$	lag	Result	Units	Dilution	RI
Total Zinc			0.0250	$\mathrm{mg/L}$	1	0.0050
Sample: 17	2638 - HLSF-	-0085-HM	W-061-0908			
<del>-</del>		0000 11111	001 0000			
Laboratory: Analysis:	Lubbock Ag, Total		Analytical Method:	S 6010B	Prep Method:	S 3010
QC Batch:	52131		Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44662		Sample Preparation:	2008-09-05	Prepared By:	KV
гтер васы.	11002		bampie i reparation.	2000 09 00	r repared by.	11. 1
D .	-	.,	RL	TT 1.	<b>T</b>	ъ.
Parameter	F	`lag	Result	Units	Dilution	R1
Total Silver			< 0.00500	m mg/L	1	0.0050
Sample: 17 Laboratory: Analysis:	<b>2638 - HLSF</b> - Lubbock As, Total	·0085-HM	W-061-0908  Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52131		Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44662		Sample Preparation:	2008-09-05	Prepared By:	KV
			m RL			
Parameter		Flag	Result	$\operatorname{Units}$	$\operatorname{Dilution}$	RI
Total Arsenio			< 0.0100	$\mathrm{mg/L}$	1	0.010

Analytical Method:

RL

Result

0.00700

Sample Preparation: 2008-09-05

Date Analyzed:

S 6010B

2008-09-08

 $\operatorname{Units}$ 

mg/L

Prep Method: S 3010A

RR

KV

RL

0.00500

Analyzed By:

Prepared By:

Dilution

Laboratory: Lubbock

Prep Batch: 44662

Ba, Total

Flag

52131

Analysis:

QC Batch:

Parameter

Total Barium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 74 of 352

5 HELSTF GROUNDWATER

Laboratory: Lubbock

Be, Total Analysis: Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 52131 2008-09-08 Analyzed By: RRPrep Batch: 44662 Sample Preparation: 2008-09-05 Prepared By: KV

RL

## Sample: 172638 - HLSF-0085-HMW-061-0908

Laboratory: Lubbock

Analysis: Cd, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RRPrep Batch: 44662 Sample Preparation: 2008-09-05 Prepared By: KV

RL

#### Sample: 172638 - HLSF-0085-HMW-061-0908

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Co. Total S 6010B QC Batch: 52131 Date Analyzed: Analyzed By: RR2008-09-08 Prep Batch: 44662 Sample Preparation: 2008-09-05 Prepared By: KV

RL

## Sample: 172638 - HLSF-0085-HMW-061-0908

Laboratory: Lubbock

Analysis: Cr, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RRPrep Batch: 44662 Sample Preparation: 2008-09-05 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 75 of 352 HELSTF GROUNDWATER

~		TTT CT

Sample:	172638 -	HLSF-0085-HM	M-001-0808

Laboratory: Lubbock Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 2008-09-08 Analyzed By: 52131 RRPrep Batch: 44662Sample Preparation: 2008-09-05 Prepared By: KV

RL

Parameter	Flag	Result	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Copper		0.0120	mg/L	1	0.00500

## Sample: 172638 - HLSF-0085-HMW-061-0908

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/AQC Batch: 52085Date Analyzed: Analyzed By: TP2008-09-04 Prep Batch: 44653Sample Preparation: 2008-09-04 Prepared By: TP

RL

Parameter	$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Mercury		< 0.000200	$\mathrm{mg/L}$	1	0.000200

### Sample: 172638 - HLSF-0085-HMW-061-0908

Laboratory: Lubbock

Ni, Total Analytical Method: Prep Method: S 3010A Analysis: S 6010B QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RRPrep Batch: 44662Sample Preparation: 2008-09-05 Prepared By: KV

RLParameter Flag Result Units Dilution RLTotal Nickel < 0.00500 0.00500 mg/L

## Sample: 172638 - HLSF-0085-HMW-061-0908

Laboratory: Lubbock

S 6010B Analysis: Pb, Total Analytical Method: Prep Method: S 3010A QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RRPrep Batch: 44662 Sample Preparation: 2008-09-05 Prepared By: KV

		m RL			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Lead		< 0.00500	$\mathrm{mg/L}$	1	0.00500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 76 of 352 65 HELSTF GROUNDWATER

Sample: 172638	8 - HLSF-0085-HMV	V-061-0908			
Laboratory: Lul	bbock Total 31	Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-08 2008-09-05	Prep Method: Analyzed By: Prepared By:	S 3010 <i>A</i> RR KV
		m RL			
Parameter	Flag	Result	$\operatorname{Units}$	Dilution	RI
Total Antimony		< 0.0200	m mg/L	1	0.0200
Sample: 172638	8 - HLSF-0085-HMV	V-061-0908			
Laboratory: Lul	bbock				
	Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch: 521		Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch: 446	662	Sample Preparation:	2008-09-05	Prepared By:	KV
		$\operatorname{RL}$			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RI
Total Selenium		0.155	$\mathrm{mg/L}$	1	0.0200
Sample: 172638	8 - HLSF-0085-HMV	<i>W</i> -061-0908			
Laboratory: Lul	bbock				
Analysis: Sn,	Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch: 521		Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch: 446	662	Sample Preparation:	2008-09-05	Prepared By:	KV
		$\mathrm{RL}$			
Parameter	$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RI
Total Tin		< 0.100	$\mathrm{mg/L}$	1	0.100

Sample: 172638 - HLSF-00	085-HMW-061-0908
--------------------------	------------------

Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Tl, Total 52131 44662		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-08 2008-09-05	Prep Method: Analyzed By: Prepared By:	RR
			$\operatorname{RL}$			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	${\bf Dilution}$	$\operatorname{RL}$
Total Thalliu	ım		< 0.0500	m mg/L	1	0.0500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 77 of 352 65 HELSTF GROUNDWATER

05			HELSTF GRO	OUNDWATER		
Sample: 17	2638 - HL	SF-0085-HM	W-061-0908			
Laboratory:	Lubbock					
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52131		Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44662		Sample Preparation:	2008-09-05	Prepared By:	KV
			m RL			
Parameter		Flag	Result	Units	Dilution	RL
Total Vanadi	ium	Tiag	0.0170	$\frac{\rm mg/L}$	1	0.00500
				O,		
Sample: 17	72638 - HL	SF-0085-HM	W-061-0908			
Laboratory:	Lubbock				_	
Analysis:	Zn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52131		Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44662		Sample Preparation:	2008-09-05	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Zinc			0.0150	m mg/L	1	0.00500
Sample: 17	2640 - HL	SF-0085-HM	W-060-0908			
Laboratory:	Lubbock			_		
Analysis:	Ag, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52131		Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44662		Sample Preparation:	2008-09-05	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Silver			< 0.00500	m mg/L	1	0.00500
Sample: 17	72640 - HL	SF-0085-HM	W-060-0908			
Laboratory:	Lubbock					
Analysis:	As, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
000	F0101		D + A 1 1	2000 00 00	, I I I I I I I I I I I I I I I I I I I	DD.

Date Analyzed:

RL

 ${\bf Result}$ 

< 0.0100

Sample Preparation: 2008-09-05

2008-09-08

 ${\bf Units}$ 

mg/L

Analyzed By:

Prepared By:

Dilution

RR

KV

RL

0.0100

QC Batch:

Parameter

Total Arsenic

Prep Batch:

52131

44662

Flag

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 78 of 352 65 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	2640 - HLS	F-0085-HM	W-060-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ba, Total 52131 44662		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-08 2008-09-05	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	Units	Dilution	RL
Total Bariun	n		0.0110	m mg/L	1	0.00500
Sample: 17 Laboratory:	<b>2640 - HLS</b> Lubbock	F-0085-HM	W-060-0908			
Analysis: QC Batch: Prep Batch:	Be, Total 52131 44662		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-08 2008-09-05	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter		Floor	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	Dilution	$\mathrm{RL}$
Total Berylli	11m	Flag	<0.00200	$\frac{\rm mg/L}$	1	0.00200
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	<b>2640 - HLS</b> Lubbock Cd, Total 52131 44662	F-0085-HM	W-060-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-08 2008-09-05	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
ъ.		T)	RL	TT	D.1 1	DI
Parameter Total Cadmi	1170	Flag	Result <0.00200	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	$\frac{\mathrm{RL}}{0.00200}$
		F-0085-HM		9/ D	<u> </u>	0.00200
Analysis: QC Batch: Prep Batch:	Co, Total 52131 44662		Analytical Method: Date Analyzed: Sample Preparation: RL	S 6010B 2008-09-08 2008-09-05	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
D .		T)	TOL	TT '	Dil et	DI

Result

< 0.00200

Units

mg/L

Dilution

RL

0.00200

Flag

Parameter

Total Cobalt

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 79 of 352 HEISTE GROUNDWATER

05	HELBIT	GROUNDWAI
Sample: 172640 - HLSF-0085-HMW-060-09	908	

Sample:	172040 -	HLST-U	199-HM A	v-000-0908

Laboratory: Lubbock Cr, Total Analysis: Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 2008-09-08 Analyzed By: 52131 RRPrep Batch: 44662 Sample Preparation: 2008-09-05 Prepared By: KV

RL

Parameter	Flag	Result	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Chromium		< 0.00500	$\mathrm{mg/L}$	1	0.00500

## Sample: 172640 - HLSF-0085-HMW-060-0908

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RRPrep Batch: 44662Sample Preparation: 2008-09-05 Prepared By: KV

RL

Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Copper		< 0.00500	$\mathrm{mg/L}$	1	0.00500

### Sample: 172640 - HLSF-0085-HMW-060-0908

Laboratory: Lubbock

Analysis: Analytical Method: Prep Method: N/A Hg, Total S 7470A QC Batch: TP52085 Date Analyzed: 2008-09-04 Analyzed By: Sample Preparation: 2008-09-04 TPPrep Batch: 44653Prepared By: RL

Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	${f Dilution}$	$\operatorname{RL}$
Total Mercury		< 0.000200	m mg/L	1	0.000200

## Sample: 172640 - HLSF-0085-HMW-060-0908

Laboratory: Lubbock

S 6010B Analysis: Ni, Total Analytical Method: Prep Method: S 3010A QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RRPrep Batch: 44662 Sample Preparation: 2008-09-05 Prepared By: KV

RL

Parameter	Flag	Result	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Nickel		< 0.00500	$\mathrm{mg/L}$	1	0.00500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 80 of 352 65 HELSTF GROUNDWATER

00			HELSIF GRO	UNDWAIER		
Sample: 17	2640 - HL	SF-0085-HMV	W-060-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Pb, Total 52131 44662		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-08 2008-09-05	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
F					F J ·	
D .		T)	RL	TT 14	D'1 - '	DI
Parameter Total Lead		Flag	Result < 0.00500	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	$\frac{\mathrm{RL}}{0.00500}$
Total Lead			<0.00500	mg/ L	1	0.00300
Sample: 17	2640 - HL	SF-0085-HMV	N-060-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Sb, Total 52131 44662		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-08 2008-09-05	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	Result	Units	Dilution	RL
Total Antimo	ony		< 0.0200	$\mathrm{mg/L}$	1	0.0200
Sample: 17 Laboratory:	<b>2640 - HL</b> : Lubbock	SF-0085-HMV	W-060-0908			
Analysis:	Se, Total		Analytical Method:	S 6010B	Prep Method:	S~3010A
QC Batch:	52131		Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44662		Sample Preparation:	2008-09-05	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Seleniu	ım		0.0220	$\mathrm{mg/L}$	1	0.0200
Sample: 17 Laboratory: Analysis: QC Batch:	<b>2640 - HL</b> Lubbock Sn, Total 52131	SF-0085-HMV	W-060-0908  Analytical Method: Date Analyzed:	S 6010B 2008-09-08	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44662		Sample Preparation:	2008-09-05	Prepared By:	KV
D.		D)	RL	TT */	DU 4	D.

Dilution

RL

0.100

Flag

 ${\bf Result}$ 

< 0.100

 ${\bf Units}$ 

mg/L

Parameter

Total Tin

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 81 of 352 65 HELSTF GROUNDWATER

Sample: 17	2640 - HL	SF-0085-HM	W-060-0908			
Laboratory:	Lubbock					
Analysis:	Tl, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52131		Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44662		Sample Preparation:	2008-09-05	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Thalliu	ım		< 0.0500	mg/L	1	0.0500
Sample: 17	2640 - HL	SF-0085-HM	W-060-0908			
Laboratory:	Lubbock					
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52131		Date Analyzed:	2008-09-08	Analyzed By:	RR
Prep Batch:	44662		Sample Preparation:	2008-09-05	Prepared By:	KV
			m RL			
Parameter		$\operatorname{Flag}$	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	$\operatorname{Dilution}$	$\operatorname{RL}$
Parameter Total Vanadi	um	Flag		$\begin{array}{c} \rm Units \\ \rm mg/L \end{array}$	Dilution 1	RL 0.00500
Total Vanadi		Flag SF-0085-HM	Result 0.0270			
Total Vanadi	2640 - HL		Result 0.0270			
Total Vanadi Sample: 17 Laboratory:	<b>2640 - HL</b> Lubbock		Result 0.0270 W-060-0908		1	
Total Vanadi	2640 - HL		Result 0.0270	m mg/L		0.00500
Total Vanadi Sample: 17 Laboratory: Analysis:	<b>2640 - HL</b> Lubbock Zn, Total		Result 0.0270  W-060-0908  Analytical Method:	mg/L S 6010B	1 Prep Method:	0.00500 S 3010A
Total Vanadi Sample: 17 Laboratory: Analysis: QC Batch:	<b>2640 - HL</b> Lubbock Zn, Total 52131		Result 0.0270  W-060-0908  Analytical Method: Date Analyzed:	mg/L S 6010B 2008-09-08	1 Prep Method: Analyzed By:	0.00500 S 3010A RR
Total Vanadi Sample: 17 Laboratory: Analysis: QC Batch:	<b>2640 - HL</b> Lubbock Zn, Total 52131		Result 0.0270  W-060-0908  Analytical Method: Date Analyzed: Sample Preparation:	mg/L S 6010B 2008-09-08	1 Prep Method: Analyzed By:	0.00500 S 3010A RR

Sample Preparation: 2008-09-08

Units

mg/L

RL

Result

< 0.00500

Prepared By: KV

RL

0.00500

Dilution

Prep Batch: 44736

Parameter

Total Silver

 $\underline{\operatorname{Flag}}$ 

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 82 of 352 65 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	2795 - HLS	F-0085-HMV	N-063-0908			
Laboratory:	Lubbock					
Analysis:	As, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	$\operatorname{Dilution}$	RL
Total Arsenic	C		< 0.0100	mg/L	1	0.0100
Sample: 17	2795 - HLS	F-0085-HMV	N-063-0908			
Laboratory:	Lubbock					
Analysis:	Ba, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
Trop Barein	11.00		Sample 1 reparation.	2000 00 00	rreparea By.	'
_			RL		<del>-</del>	
Parameter		Flag	Result	Units	Dilution	RL
Total Barium	1		0.00600	m mg/L	1	0.00500
-		F-0085-HMV	W-063-0908			
Laboratory:	Lubbock			G 00407		0.00101
Analysis:	Be, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Berylli	um		< 0.00200	m mg/L	1	0.00200
Sample: 17	2795 - HLS	F-0085-HMV	N-063-0908			
Laboratory:	Lubbock					
Analysis:	Cd, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
			$\mathrm{RL}$			

Result

< 0.00200

Units

mg/L

Dilution

RL

0.00200

 $\underline{\operatorname{Flag}}$ 

Parameter

Total Cadmium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 83 of 352 HELSTF GROUNDWATER

Sample: 17	2795 - HLS	F-0085-HMV	W-063-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Co, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Cobalt			< 0.00200	m mg/L	1	0.00200
Laboratory: Analysis:	Lubbock Cr, Total	F-0085-HMV	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch: Prep Batch:	52201 44736		Date Analyzed: Sample Preparation:	2008-09-09 2008-09-08	Analyzed By: Prepared By:	$rac{ ext{RR}}{ ext{KV}}$
ттер васен.	11100			2000 03 00	Trepared By.	17. 1
			$\operatorname{RL}$			
Parameter		$Fla\sigma$	Regult	Units	Dilution	RI.
	ium	Flag	Result <b>0.00900</b>	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	
Parameter Total Chromi Sample: 173			0.00900	<u> </u>		RL 0.00500
Total Chromi Sample: 172	2795 - HLS	Flag F-0085-HMV	0.00900	<u> </u>		
Total Chromi  Sample: 172  Laboratory: Analysis: QC Batch:			0.00900	<u> </u>		
Total Chromi	2795 - HLS Lubbock Cu, Total 52201 44736		0.00900  W-063-0908  Analytical Method: Date Analyzed:	mg/L S 6010B 2008-09-09	1 Prep Method: Analyzed By:	0.00500 S 3010A RR

Sample Preparation: 2008-09-11

Units

mg/L

 $\operatorname{RL}$ 

Result

< 0.000200

Prepared By:

Dilution

TP

RL

0.000200

Prep Batch: 44821

Parameter

Total Mercury

 $\operatorname{Flag}$ 

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 84 of 352
65 HELSTE GROUNDWATER

<u>65</u>			HELSTF GRO	UNDWATER		
Sample: 17	2795 - HL	SF-0085-HM	W-063-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ni, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		Flag	Result	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Nickel			< 0.00500	m mg/L	1	0.00500
Sample: 17	2795 - HL	SF-0085-HM	W-063-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Pb, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
To .		T.	RL	TT 1:	T.U I	D.I.
Parameter Total Lead		Flag	Result < 0.00500	Units	Dilution 1	$\frac{\mathrm{RL}}{0.00500}$
Total Ecad			X0.00000	${ m mg/L}$		0.00000
Sample: 17	2795 - HL	SF-0085-HM	W-063-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Sb, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
D.		T)	RL	TT 11	D.1	DI
Parameter		Flag	Result	Units	Dilution	RL
Total Antimo	ony		< 0.0200	m mg/L	1	0.0200
Sample: 17	2795 - HL	SF-0085-HM	W-063-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Se, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV

RL

 ${\bf Units}$ 

mg/L

Result

0.0240

Dilution

RL

0.0200

Flag

Parameter

Total Selenium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 85 of 352 65 HELSTF GROUNDWATER

Sample: 17	2795 - HLS	SF-0085-HM	W-063-0908			
Laboratory:	Lubbock					
Analysis:	Sn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	511, 100a1 $52201$		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
ттер васен.	11100		bampic i reparation.	2000-03-00	r repared By.	17 A
			$\operatorname{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Tin			< 0.100	m mg/L	1	0.100
Sample: 17	2795 - HLS	SF-0085-HM	W_063_0908			
-		31 -0000-11W1	VV -000-0000			
Laboratory:	Lubbock		A latinata	C COLOD	TD TATELY T	0.90104
Analysis:	Tl, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
			m RL			
Parameter		1731	Result	$\operatorname{Units}$	$\operatorname{Dilution}$	DI
1 arameter		riag	nesun	Umus	Dilution	$n_{\rm L}$
Total Thalliu	ım	Flag	<0.0500	mg/L	Dilution 1	$\frac{\mathrm{RL}}{0.0500}$
Total Thalliu Sample: 17	2795 - HLS	F1ag SF-0085-HM	< 0.0500			
Total Thalliu  Sample: 17: Laboratory:	<b>2795 - HL</b> S Lubbock		<0.0500 W-063-0908	m mg/L	1	0.0500
Total Thalliu  Sample: 17  Laboratory: Analysis:	<b>2795 - HL</b> S Lubbock V, Total		<0.0500  W-063-0908  Analytical Method:	mg/L S 6010B	1 Prep Method:	0.0500 S 3010A
Total Thalliu Sample: 17 Laboratory: Analysis: QC Batch:	<b>2795 - HL</b> S Lubbock V, Total 52201		<0.0500  W-063-0908  Analytical Method: Date Analyzed:	mg/L S 6010B 2008-09-09	1 Prep Method: Analyzed By:	0.0500 S 3010A RR
Total Thalliu  Sample: 17  Laboratory: Analysis: QC Batch:	<b>2795 - HL</b> S Lubbock V, Total		<0.0500  W-063-0908  Analytical Method:	mg/L S 6010B	1 Prep Method:	0.0500 S 3010A
Sample: 17 Laboratory: Analysis: QC Batch:	<b>2795 - HL</b> S Lubbock V, Total 52201		<0.0500  W-063-0908  Analytical Method: Date Analyzed:	mg/L S 6010B 2008-09-09	1 Prep Method: Analyzed By:	0.0500 S 3010A RR
Total Thalliu  Sample: 17:  Laboratory: Analysis: QC Batch: Prep Batch:	<b>2795 - HL</b> S Lubbock V, Total 52201		<0.0500  W-063-0908  Analytical Method: Date Analyzed: Sample Preparation:	mg/L S 6010B 2008-09-09	1 Prep Method: Analyzed By:	0.0500 S 3010A RR
Total Thalliu	<b>2795 - HLS</b> Lubbock V, Total 52201 44736	SF-0085-HM	<0.0500  W-063-0908  Analytical Method: Date Analyzed: Sample Preparation: RL	mg/L S 6010B 2008-09-09 2008-09-08	1 Prep Method: Analyzed By: Prepared By:	0.0500 S 3010A RR KV
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch: Parameter Total Vanadi	2795 - HLS Lubbock V, Total 52201 44736 um	SF-0085-HM	<0.0500  W-063-0908  Analytical Method: Date Analyzed: Sample Preparation:  RL Result 0.0280	mg/L S 6010B 2008-09-09 2008-09-08 Units	1 Prep Method: Analyzed By: Prepared By: Dilution	0.0500 S 3010A RR KV

RL

Units

mg/L

Result

0.00900

Dilution

RL

0.00500

 $\underline{\text{Flag}}$ 

Parameter

Total Zinc

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 86 of 352 65 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	2797 - HLS	F-0085-HM	IW-058-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ag, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		Flag	Result	Units	Dilution	$\mathrm{RL}$
Total Silver			< 0.00500	m mg/L	1	0.00500
Laboratory: Analysis: QC Batch:	<b>2797 - HLS</b> Lubbock As, Total 52201 44736	F-0085-HM	Analytical Method: Date Analyzed:	S 6010B 2008-09-09	Prep Method: Analyzed By: Prepared By:	S 3010A RR
Prep Batch:	44730		Sample Preparation:	2008-09-08	Prepared By:	KV
Parameter Total Arsenic	c	Flag	RL Result <0.0100	$\begin{array}{c} \text{Units} \\ \text{mg/L} \end{array}$	Dilution 1	RL 0.0100
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	<b>2797 - HLS</b> Lubbock Ba, Total 52201 44736	F-0085-HM	IW-058-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Trep Baten.	11100			2000 00 00	r repared By.	11. (
Parameter		Flag	$rac{ ext{RL}}{ ext{Result}}$	${ m Units}$	$\operatorname{Dilution}$	$\mathrm{RL}$
Total Barium	n	1148	0.00800	mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Be, Total 52201 44736	F-0085-HM	IW-058-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Propaged By:	S 3010A RR
rrep <b>b</b> atch:	44700			∠UUO-U9-Uŏ	Prepared By:	KV
			RL			

Result

< 0.00200

Units

mg/L

Dilution

RL

0.00200

Flag

Parameter

Total Beryllium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 87 of 352 HELSTF GROUNDWATER

HLSF-0085-HM ock Cotal	W-058-0908  Analytical Method:			
Cotal	Analytical Method:			
,	Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
	m RL			
$\operatorname{Flag}$	Result	Units	Dilution	RL
	< 0.00200	${ m mg/L}$	1	0.00200
HLSF-0085-HM	W-058-0908			
Cotal	Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Flag	RL Result	Units	Dilution	m RL
1100	< 0.00200	mg/L	1	0.00200
ock otal	W-058-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Flag	RL Posult	Units	Dilution	m RL
riag		$\frac{\rm cmcs}{\rm mg/L}$	1	0.00500
, [16	- HLSF-0085-HM rock Fotal 1 6	Flag Result  - HLSF-0085-HMW-058-0908 Fock Fotal Analytical Method: 1 Date Analyzed: Sample Preparation: RL Flag Result < <0.00200 - HLSF-0085-HMW-058-0908 Fock Fotal Analytical Method: 1 Date Analyzed: Sample Preparation: RECOURT Analyzed: Sample Preparation: RECOURT Analyzed: Sample Preparation: RECOURT Analyzed: RECOURT Analyzed: Sample Preparation:	Flag   Result   Units	Flag

Flag

Result

0.0140

 ${\bf Units}$ 

mg/L

Dilution

RL

0.00500

Parameter

Total Copper

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 88 of 352 HELSTF GROUNDWATER

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: 52284 Date Analyzed: 2008-09-11 Prep Batch: 44821 Sample Preparation: 2008-09-11

RL

Prep Method:

Analyzed By:

Prepared By:

N/A

TP

TP

### Sample: 172797 - HLSF-0085-HMW-058-0908

Laboratory: Lubbock

Analysis: Ni, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RRPrep Batch: 44736 Sample Preparation: 2008-09-08 Prepared By: KV

RL

RL

#### Sample: 172797 - HLSF-0085-HMW-058-0908

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Pb, Total S 6010B QC Batch: 52201 Date Analyzed: Analyzed By: RR2008-09-09 Prep Batch: 44736 Sample Preparation: 2008-09-08 Prepared By: KV

## Sample: 172797 - HLSF-0085-HMW-058-0908

Laboratory: Lubbock

Analysis: Sb, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RRPrep Batch: 44736Sample Preparation: 2008-09-08 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 89 of 352 65 HELSTF GROUNDWATER

00			HEESTI GRO	ONDWALLIC		
Sample: 17	2797 - HL	SF-0085-HM	W-058-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Se, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Seleniu	ım		0.0620	$\mathrm{mg/L}$	1	0.0200
Sample: 17	2797 - HL	SF-0085-HM	W-058-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Sn, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
D		DI	RL	TT **	D'1 - 1'	DI
$\frac{\text{Parameter}}{\text{Total Tin}}$		Flag	Result < 0.100	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	0.100
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	<b>2797 - HL</b> Lubbock Tl, Total 52201 44736	SF-0085-HM	W-058-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Thalliu	ım		< 0.0500	m mg/L	1	0.0500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	<b>2797 - HL</b> Lubbock V, Total 52201 44736	SF-0085-HM	W-058-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
-			$ m_{RL}$		2 0	

 $\operatorname{Result}$ 

0.0290

Units

mg/L

Dilution

RL

0.00500

 $\underline{\operatorname{Flag}}$ 

Parameter

Total Vanadium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 90 of 352

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201	Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736	Sample Preparation:	2008-09-08	Prepared By:	KV
		m RL			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Zinc		0.400	$\mathrm{mg/L}$	1	0.00500

Laboratory: Analysis: QC Batch: Prep Batch:	Ag, Total $52201$		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	RR
			$\operatorname{RL}$			
$\operatorname{Parameter}$		Flag	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	$\operatorname{RL}$
Total Silver			< 0.00500	m mg/L	1	0.00500

ple Preparation: 2008-09-0	· ·	
· ·	· ·	
Analyzed. 2000-05-0	OB Anaryzeu D	γ. 1010
Analyzed: 2008-09-0	00 Analyzod B	PP
ytical Method: S 6010B	Prep Metho	d: S 3010A
	·	·

Sample: 172908 - HLSF-0085-HMW-057-0908

Sample: 172908 - HLSF-0085-HMW-057-0908

Parameter	$\operatorname{Flag}$	Result	$\operatorname{Units}$	${f Dilution}$	RL
Total Arsenic		< 0.0100	$\mathrm{mg/L}$	1	0.0100
•					

Laboratory: Analysis: QC Batch: Prep Batch:	$\begin{array}{c} \text{Ba, Total} \\ 52201 \end{array}$		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	RR
Parameter Parameter	11100	$\operatorname{Flag}$	RL Result	Units	Dilution	RL
Total Barium	n		0.0300	mg/L	1	0.00500

Report Date: October 7, 2008 65	Work Order: 8080828 HELSTF GROUNDWATER	Page Number: 91 of 352		
Sample: 172908 - HLSF-0085-HI	MW-057-0908			
Laboratory: Lubbock	Applytical Mathed. C 6010D	Drop Mothod, C 2010A		

Allarysis.	DC, TOTAL	Analysical Meshod.	5 0010 <b>D</b>	r rep memou.	D 9010
QC Batch:	52201	Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736	Sample Preparation:	2008-09-08	Prepared By:	KV

		m RL			
Parameter	Flag	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Beryllium		< 0.00200	m mg/L	1	0.00200

# Sample: 172908 - HLSF-0085-HMW-057-0908

Laboratory:	Lubbock				
Analysis:	Cd, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201	Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736	Sample Preparation:	2008-09-08	Prepared By:	KV
		$\mathrm{RL}$			

		17.17			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Cadmium		< 0.00200	m mg/L	1	0.00200

# Sample: 172908 - HLSF-0085-HMW-057-0908

Laboratory:	Lubbock				
Analysis:	Co, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201	Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736	Sample Preparation:	2008-09-08	Prepared By:	KV
		DΙ			

Parameter	Flag	Result	$\operatorname{Units}$	Dilution	$\mathrm{RL}$
Total Cobalt	0	< 0.00200	m mg/L	1	0.00200

# Sample: 172908 - HLSF-0085-HMW-057-0908

Total Chromium

Laboratory: Analysis: QC Batch: Prep Batch:	$ \begin{array}{c} \operatorname{Cr}, \operatorname{Total} \\ 52201 \end{array} $		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	RR
Parameter		$\operatorname{Flag}$	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	$\operatorname{Dilution}$	m RL

mg/L

0.00500

< 0.00500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 92 of 352 HELSTF GROUNDWATER

•			
Sample: 172008	HISE MOSE HI	/IXX/ 057 0008	

sample:	172908 -	HP2L-0099	)-HM W.	-057-0908

Laboratory: Lubbock Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 2008-09-09 Analyzed By: 52201 RRPrep Batch: 44736 Sample Preparation: 2008-09-08 Prepared By: KV

RL

Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Copper		0.00800	mg/L	1	0.00500

## Sample: 172908 - HLSF-0085-HMW-057-0908

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/A QC Batch: 52284 Date Analyzed: Analyzed By: TP2008-09-11 Prep Batch: 44821Sample Preparation: 2008-09-11 Prepared By: TP

RL

Parameter	$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Mercury		< 0.000200	mg/L	1	0.000200

# Sample: 172908 - HLSF-0085-HMW-057-0908

Laboratory: Lubbock

Analysis: Ni, Total Analytical Method: Prep Method: S 3010A S 6010B QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RRPrep Batch: 44736 Sample Preparation: 2008-09-08 Prepared By: KV

RL

Parameter	$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Nickel		< 0.00500	${ m mg/L}$	1	0.00500

## Sample: 172908 - HLSF-0085-HMW-057-0908

Laboratory: Lubbock

S 6010B Analysis: Pb, Total Analytical Method: Prep Method: S 3010A QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RRPrep Batch: 44736 Sample Preparation: 2008-09-08 Prepared By: KV

		$\operatorname{RL}$			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Lead		< 0.00500	$\mathrm{mg/L}$	1	0.00500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 93 of 352 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	2908 - HL	SF-0085-HM	W-057-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Sb, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Antimo	ony		< 0.0200	m mg/L	1	0.0200
Sample: 17	2908 - HL	SF-0085-HM	W-057-0908			
Laboratory:	Lubbock					
Analysis:	Se, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Seleniu	ım		0.0510	$\mathrm{mg/L}$	1	0.0200
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	2908 - HLS Lubbock Sn, Total 52201 44736	SF-0085-HM	W-057-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
_			RL			
Parameter		Flag	Result	Units	Dilution	RL
Total Tin			<0.100	mg/L	1	0.100
Sample: 17	2908 - HL	SF-0085-HM	W-057-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Tl, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
_			RL			_
Parameter		Flag	Result	Units	Dilution	RL
Total Thalling	ım		<0.0500	mæ/L	1	0.0500

< 0.0500

mg/L

Total Thallium

0.0500

Work Order: 8080828 HELSTF GROUNDWATER Report Date: October 7, 2008 Page Number: 94 of 352

65			HELSTF GRO	UNDWATER		
Sample: 17	2908 - HL	SF-0085-HM	W-057-0908			
Laboratory:	Lubbock					
Analysis:	V, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Vanadi	um		0.0280	m mg/L	1	0.00500
Sample: 17	2908 - HL	SF-0085-HM	W-057-0908			
Laboratory:	Lubbock					
Analysis:	Zn, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
			RL			
Parameter		Flag	$\operatorname{Result}$	Units	$\operatorname{Dilution}$	RL
Total Zinc			0.0280	m mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	2910 - HLS Lubbock Ag, Total 52201 44736	SF-0085-DRV	W-002-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		Flag	$\operatorname{Result}$	Units	Dilution	RL
Total Silver			< 0.00500	$\mathrm{mg/L}$	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	<b>2910 - HL</b> S Lubbock As, Total 52201 44736	SF-0085-DRV	W-002-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			m RL			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	Dilution	RL
Total Argonic	•		<0.0100	m c / I	1	0.0100

< 0.0100

Total Arsenic

mg/L

RL0.0100 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 95 of 352 65 HELSTF GROUNDWATER

00			nelsir Gro	UNDWALER		
Sample: 17	2910 - HLSI	F-0085-DRW-	002-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ba, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	Result	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Barium	1		0.0250	m mg/L	1	0.00500
Sample: 17 Laboratory: Analysis:	<b>2910 - HLSF</b> Lubbock Be, Total	F-0085-DRW-	.002-0908  Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
			m RL			
Parameter		Flag	Result	Units	Dilution	$\mathrm{RL}$
Total Berylli	um		< 0.00200	$_{ m mg/L}$	1	0.00200
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	<b>2910 - HLSF</b> Lubbock Cd, Total 52201 44736	F-0085-DRW-	Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
<b>.</b>		T.I	RL	TT 1:	Du et	DI
Parameter Total Cadmin	um	Flag	Result < 0.00200	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	$\frac{RL}{0.00200}$
Total Cadilli	uIII		<u> </u>	mg/ L	1	0.00200
Sample: 17	2910 - HLSF	F-0085-DRW-	002-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Co, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV

RL

Units

mg/L

Dilution

RL

0.00200

Result

< 0.00200

Flag

Parameter

Total Cobalt

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 96 of 352 HELSTF GROUNDWATER

09	TILLEDIT	OILOUNDWAI

Laboratory: Lubbock

Analysis: Cr, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR Prep Batch: 44736 Sample Preparation: 2008-09-08 Prepared By: KV

RL

Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Chromium		0.166	$\mathrm{mg/L}$	1	0.00500

## Sample: 172910 - HLSF-0085-DRW-002-0908

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RRPrep Batch: 44736Sample Preparation: 2008-09-08 Prepared By: KV

RL

Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Copper		< 0.00500	$\mathrm{mg/L}$	1	0.00500

# Sample: 172910 - HLSF-0085-DRW-002-0908

Laboratory: Lubbock

Analysis: Analytical Method: Prep Method: N/A Hg, Total S 7470A QC Batch: TP52284 Date Analyzed: 2008-09-11 Analyzed By: Sample Preparation: 2008-09-11 TPPrep Batch: 44821Prepared By:

RL

Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Mercury		< 0.000200	$\mathrm{mg/L}$	1	0.000200

## Sample: 172910 - HLSF-0085-DRW-002-0908

Laboratory: Lubbock

S 6010B Analysis: Ni, Total Analytical Method: Prep Method: S 3010A QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RRPrep Batch: 44736 Sample Preparation: Prepared By: 2008-09-08 KV

RL

Parameter	Flag	Result	$\operatorname{Units}$	Dilution	$\operatorname{RL}$
Total Nickel		0.0350	$\mathrm{mg/L}$	1	0.00500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 97 of 352 65 HELSTF GROUNDWATER

Sample: 172 Laboratory:	<b>2910 - HLS</b> Lubbock Pb, Total	SF-0085-DRV	V-002-0908			
Laboratory:						
Analysis:	10, 1000		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
rep Basen.	11100		pampie i reparation.	2000 00 00	r repared by.	11 1
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Lead			< 0.00500	$\mathrm{mg/L}$	1	0.00500
Sample: 172	2910 - HLS	SF-0085-DRV	V-002-0908			
-		22 0000 220.				
Laboratory:	Lubbock		A 1 135 1	C 4010D	D 14.1.1	0.0010.4
Analysis:	Sb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52201		Date Analyzed:	2008-09-09	Analyzed By:	RR
Prep Batch:	44736		Sample Preparation:	2008-09-08	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		Flag	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	RL
Total Antimo	ny		< 0.0200	$\mathrm{mg/L}$	1	0.0200
Sample: 172 Laboratory: Analysis: QC Batch: Prep Batch:	2910 - HLS Lubbock Se, Total 52201 44736	SF-0085-DRV	V-002-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
_			$_{ m L}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Seleniui	m		<0.0200	mg/L	1	0.0200
Laboratory: Analysis:	<b>2910 - HL</b> S Lubbock Sn, Total	SF-0085-DRV	<0.0200 V-002-0908  Analytical Method: Date Analyzed:	mg/L S 6010B 2008-09-09	1 Prep Method: Analyzed By:	Ç,
QC Batch: Prep Batch:	52201 $44736$		Sample Preparation:	2008-09-09	Prepared By:	$rac{ ext{RR}}{ ext{KV}}$
TTOP Datem	11,00		Sample 1 Teparation.	_000 00 00	rioparea by.	11.
			$\operatorname{RL}$			

Units

mg/L

Result

< 0.100

Dilution

RL

0.100

Flag

Parameter

Total Tin

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 98 of 352 65 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	'2910 - HL	SF-0085-DRV	V-002-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Tl, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Thalliu	ım		< 0.0500	$\mathrm{mg/L}$	1	0.0500
Sample: 17	72910 - HL	SF-0085-DRV	V-002-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock V, Total 52201 44736		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter		$\operatorname{Flag}$	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	$\operatorname{Dilution}$	$\operatorname{RL}$
Total Vanadi	ium	rag	0.00700	$\frac{\rm mg/L}$	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	<b>2910 - HL</b> Lubbock Zn, Total 52201 44736	SF-0085-DRV	V-002-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-09 2008-09-08	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
ъ.		T)	RL	TT 1.	D.U I	D.I.
$\frac{\text{Parameter}}{\text{Total Zinc}}$		Flag	Result  0.181	Units	Dilution 1	$\frac{\mathrm{RL}}{0.00500}$
	73041 - HL	SF-0085-RB-0		m mg/L	1	0.00300
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Ag, Total 52279 44806		Analytical Method: Date Analyzed: Sample Preparation: RL	S 6010B 2008-09-11 2008-09-11	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
D 4		Tall	ILL D	TT '.	D'1 + '	DI

Result

< 0.00500

 ${\rm Units}$ 

mg/L

Dilution

RL

0.00500

Flag

Parameter

Total Silver

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 99 of 352 HELSTF GROUNDWATER

65			HELSTF GRO	UNDWATER		
Sample: 17	3041 - HLS	F-0085-RB-0	001-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock As, Total 52279 44806		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-11 2008-09-11	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter		Flag	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	$\operatorname{Dilution}$	m RL
Total Arsenic	3	1 145	<0.0100	mg/L	1	0.0100
Sample: 17. Laboratory: Analysis: QC Batch: Prep Batch:	3041 - HLS Lubbock Ba, Total 52279 44806	F-0085-RB-(	001-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-11 2008-09-11	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter Total Barium	1	Flag	RL Result <0.00500	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	RL 0.00500
Sample: 17. Laboratory: Analysis: QC Batch: Prep Batch:	<b>3041 - HLS</b> Lubbock Be, Total 52279 44806	F-0085-RB-0	001-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-11 2008-09-11	Prep Method: Analyzed By: Prepared By:	S 3010A RR KV
Parameter		Flag	RL Result	$\operatorname{Units}$	$\Gamma$ Dilution	m RL
Total Berylli	um		< 0.00200	$\mathrm{mg/L}$	1	0.00200
Sample: 17. Laboratory: Analysis: QC Batch:	<b>3041 - HLS</b> Lubbock Cd, Total 52279	F-0085-RB-(	001-0908 Analytical Method: Date Analyzed:	S 6010B 2008-09-11	Prep Method: Analyzed By:	S 3010A RR

RL

 ${\bf Units}$ 

mg/L

Dilution

RL

0.00200

Result

< 0.00200

 $\underline{\operatorname{Flag}}$ 

Parameter

Total Cadmium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 100 of 352

HELSTF GROUNDWATER

Sample: 173041 - HLSF-0085-RB-001-0908

Laboratory: Lubbock

Analysis: Co, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

Sample: 173041 - HLSF-0085-RB-001-0908

Laboratory: Lubbock

Analysis: Cr, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52279 Analyzed By: Date Analyzed: 2008-09-11 RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

Sample: 173041 - HLSF-0085-RB-001-0908

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Cu, Total S 6010B QC Batch: 52279 Date Analyzed: Analyzed By: RR2008-09-11 Prep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

Sample: 173041 - HLSF-0085-RB-001-0908

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/AQC Batch: 52287 2008-09-11 Analyzed By: TPDate Analyzed: Prep Batch: 44821Sample Preparation: 2008-09-11 Prepared By: TP

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 101 of 352 65 HELSTF GROUNDWATER

Sample: 17	3041 - HLS	SF-0085-RB-	001-0908			
Laboratory:	Lubbock					
Analysis:	Ni, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52279		Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared By:	KV
Trop Bacon.	11000		bampio i reparation.	2000 00 11	Troparea By.	11 ,
			$\mathrm{RL}$			
Parameter		Flag	Result	Units	Dilution	RL
Total Nickel			< 0.00500	$\mathrm{mg/L}$	1	0.00500
Sample: 17	3041 - HLS	SF-0085-RB-	001-0908			
Laboratory:	Lubbock					
Analysis:	Pb, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52279		Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared By:	KV
			$\operatorname{RL}$			
Danamatan				TT		
$\operatorname{Parameter}$		Flag	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dilution}$	$\operatorname{RL}$
Total Lead		Flag	Result <0.00500	Units mg/L	Dilution 1	$\frac{\mathrm{RL}}{0.00500}$
Total Lead	3041 - HLS	Flag SF-0085-RB-	<0.00500			
Total Lead  Sample: 17  Laboratory:	Lubbock		<0.00500 001-0908	${ m mg/L}$	1	0.00500
Total Lead  Sample: 17  Laboratory: Analysis:	Lubbock Sb, Total		<0.00500  001-0908  Analytical Method:	mg/L S 6010B	1 Prep Method:	0.00500 S 3010A
Total Lead  Sample: 17  Laboratory: Analysis: QC Batch:	Lubbock Sb, Total 52279		<0.00500  001-0908  Analytical Method: Date Analyzed:	mg/L S 6010B 2008-09-11	1 Prep Method: Analyzed By:	0.00500 S 3010A RR
Total Lead  Sample: 17  Laboratory: Analysis:	Lubbock Sb, Total		<0.00500  001-0908  Analytical Method:	mg/L S 6010B	1 Prep Method:	0.00500 S 3010A
Total Lead  Sample: 17  Laboratory: Analysis: QC Batch:	Lubbock Sb, Total 52279		<0.00500  001-0908  Analytical Method: Date Analyzed:	mg/L S 6010B 2008-09-11	1 Prep Method: Analyzed By: Prepared By:	0.00500 S 3010A RR
Total Lead  Sample: 17  Laboratory: Analysis: QC Batch:	Lubbock Sb, Total 52279		<0.00500  001-0908  Analytical Method: Date Analyzed: Sample Preparation:	mg/L S 6010B 2008-09-11	1 Prep Method: Analyzed By:	0.00500 S 3010A RR
Total Lead  Sample: 17  Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Sb, Total 52279 44806	SF-0085-RB-	<0.00500  001-0908  Analytical Method: Date Analyzed: Sample Preparation: RL	mg/L S 6010B 2008-09-11 2008-09-11	1 Prep Method: Analyzed By: Prepared By:	0.00500 S 3010A RR KV
Total Lead  Sample: 17  Laboratory: Analysis: QC Batch: Prep Batch:  Parameter  Total Antimo	Lubbock Sb, Total 52279 44806	SF-0085-RB-	<0.00500  001-0908  Analytical Method: Date Analyzed: Sample Preparation:  RL  Result <0.0200	mg/L S 6010B 2008-09-11 2008-09-11	1 Prep Method: Analyzed By: Prepared By: Dilution	0.00500 S 3010A RR KV

 $\mathrm{RL}$ 

Units

mg/L

Result

< 0.0200

Dilution

RL

0.0200

Flag

Parameter

Total Selenium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 102 of 352

65		HELSTF GROU	UNDWATER	Ö	
Sample: 1	73041 - HLSF-0085	-RB-001-0908			
Laboratory: Analysis:		Analytical Method:	S 6010B	Prep Method:	S 3010A

QC Batch:	52279		Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	${\bf Dilution}$	RL
Total Tin			< 0.100	$_{ m mg/L}$	1	0.100

Laboratory:	Lubbock				
Analysis:	Tl, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52279	Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806	Sample Preparation:	2008-09-11	Prepared By:	KV
		RI.			

		RL			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Thallium		< 0.0500	mg/L	1	0.0500

## Sample: 173041 - HLSF-0085-RB-001-0908

Sample: 173041 - HLSF-0085-RB-001-0908

Total Zinc

Laboratory:	Lubbock				
Analysis:	V, Total	Analytical Method:	S 6010B	Prep Method:	S 3010 $A$
QC Batch:	52279	Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806	Sample Preparation:	2008-09-11	Prepared By:	KV
		DI			

Darameter	Flag	Docult	Unita	Dilution	$\operatorname{RL}$
1 arameter	Flag	nesum	Units	Dilution	ILL
Total Vanadium		< 0.00500	m mg/L	1	0.00500

## Sample: 173041 - HLSF-0085-RB-001-0908

Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock Zn, Total 52279 44806		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-11 2008-09-11	Prep Method: Analyzed By: Prepared By:	RR
Parameter		Flag	$rac{ ext{RL}}{ ext{Result}}$	$\operatorname{Units}$	Dilution	m RL

mg/L

0.00500

< 0.00500

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 103 of 352 65 HELSTF GROUNDWATER

00			nelsir Gno	JNDWALER		
Sample: 17	3043 - HLSF-0	085-HCF-	003-0908			
Laboratory:	Lubbock					
Analysis:	Ag, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52279		Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared By:	KV
F			S &		F J	
			$\mathrm{RL}$			
Parameter	Fla	ıg	Result	Units	Dilution	RI
Total Silver			< 0.00500	$\mathrm{mg/L}$	1	0.00500
Laboratory:	3043 - HLSF-0	085-HCF-		0.00405		9 2010
Analysis:	As, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52279		Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		lag	Result	Units	Dilution	RL
Total Arsenie	c		< 0.0100	m mg/L	1	0.0100
Sample: 17 Laboratory:	3043 - HLSF-0 Lubbock	085-HCF-	003-0908			
Analysis:	Ba, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52279		Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared By:	KV
1			-		1	
Darameter	T.	lag	$rac{ ext{RL}}{ ext{Result}}$	Units	Dilution	DI
Parameter Total Bariun		iag	0.0580	$\frac{\rm mg/L}$	1	0.00500
Total Ballun	11		0.0000	mg/ L	1	0.00000
Sample: 17 Laboratory:	3043 - HLSF-0 Lubbock	085-HCF-	003-0908			
Analysis:	Be, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	$52\overline{279}$		Date Analyzed:	2008-09-11	Analyzed By:	RR
D D. 4 . l.			C1- D+:	2002 00 11	י דער אינער אי	T/ 1/

Sample Preparation: 2008-09-11

Units

mg/L

RL

Result

< 0.00200

Prepared By:

Dilution

KV

RL

0.00200

Prep Batch: 44806

Parameter

Total Beryllium

Flag

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 104 of 352

HELSTF GROUNDWATER

Laboratory: Lubbock

Analysis: Cd, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 52279 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

# Sample: 173043 - HLSF-0085-HCF-003-0908

Laboratory: Lubbock

Analysis: Co, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

#### Sample: 173043 - HLSF-0085-HCF-003-0908

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Cr. Total S 6010B QC Batch: 52279 Date Analyzed: Analyzed By: RR2008-09-11 Prep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

## Sample: 173043 - HLSF-0085-HCF-003-0908

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 105 of 352

HELSTF GROUNDWATER

Sample: 173043 - HLSF-0085-HCF-003-0908

Laboratory: Lubbock

Analytical Method: Analysis: Hg, Total S 7470A Prep Method: N/AQC Batch: Date Analyzed: TP52287 2008-09-11 Analyzed By: Prep Batch: 44821 Sample Preparation: 2008-09-11 Prepared By: TP

RL

Sample: 173043 - HLSF-0085-HCF-003-0908

Laboratory: Lubbock

Analysis: Ni, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52279 Date Analyzed: Analyzed By: 2008-09-11 RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

RL

Sample: 173043 - HLSF-0085-HCF-003-0908

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Pb, Total S 6010B QC Batch: 52279 Date Analyzed: Analyzed By: RR2008-09-11 Prep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

Sample: 173043 - HLSF-0085-HCF-003-0908

Laboratory: Lubbock

Prep Method: S 3010A Analysis: Sb, Total Analytical Method: S 6010B QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 106 of 352 HELSTF GROUNDWATER

Laboratory:	Lubbock					
Analysis:	Se, Total		Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	$52\overline{279}$		Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Seleniu	ım		< 0.0200	m mg/L	1	0.0200
Sample: 17 Laboratory: Analysis: QC Batch:	3043 - HLSI Lubbock Sn, Total 52279	F-0085-HC	F-003-0908  Analytical Method: Date Analyzed:	S 6010B 2008-09-11	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared By:	KV
			$\operatorname{RL}$			
Parameter		Flag	Result	Units	Dilution	$\mathrm{RL}$
Total Tin			< 0.100	m mg/L	1	0.100
Laboratory: Analysis: QC Batch:	<b>3043 - HLSI</b> Lubbock Tl, Total 52279	F-0085-HC1	Analytical Method: Date Analyzed:	S 6010B 2008-09-11	Prep Method: Analyzed By:	S 3010A RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared By:	KV
D		D1	RL Dlt	TT:4-	D:14:	DI
Parameter	ım	Flag	Result < 0.0500	Units	Dilution 1	$\frac{RL}{0.0500}$
Total Thalliu	LIII		<0.0000 <0.0000	m mg/L	1	0.0000

Analytical Method:

Sample Preparation:

Result

0.0170

RL

Date Analyzed:

S 6010B

2008-09-11

2008-09-11

Units

mg/L

Prep Method: S 3010A

RR

KV

RL

0.00500

Analyzed By:

Prepared By:

Dilution

Laboratory: Lubbock

Prep Batch: 44806

V, Total

Flag

52279

Analysis:

QC Batch:

Parameter

Total Vanadium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 107 of 352 65 HELSTF GROUNDWATER

Laboratory:	Lubbock				
Analysis:	Zn, Total	Analytical Method:	S 6010B	Prep Method:	S 3010A
QC Batch:	52279	Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806	Sample Preparation:	2008-09-11	Prepared By:	KV
		m RL			
Parameter	Flag	Result	$\operatorname{Units}$	Dilution	RI
Total Zinc		< 0.00500	mg/L	1	0.00500
-	3045 - HLSF-0085	-HCF-103-0908			
Laboratory:	Lubbock	A 1 (* 1 3 # (1 1	C C010D	D M.1.1	C 2010/
Analysis:	Ag, Total 52279	Analytical Method: Date Analyzed:	S 6010B 2008-09-11	Prep Method: Analyzed By:	S 3010A RR
QC Batch: Prep Batch:	52279 44806	Sample Preparation:	2008-09-11	Anaryzed By: Prepared By:	KK KV
гтер васси:	44000	Sample Preparation:	2006-09-11	Frepared by:	ΝV
		m RL			
Parameter	Flag	$\operatorname{Result}$	Units	Dilution	RI
Total Silver		< 0.00500	m mg/L	1	0.00500
Sample: 17 Laboratory: Analysis: QC Batch: Prep Batch:	3045 - HLSF-0085 Lubbock As, Total 52279 44806	-HCF-103-0908  Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-11 2008-09-11	Prep Method: Analyzed By: Prepared By:	S 3010 <i>A</i> RR KV
		m RL			
Parameter	Flag	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RI
Total Arsenic		< 0.0100	$\mathrm{mg/L}$	1	0.0100

QC Batch:	52279		Date Analyzed:	2008-09-11	Analyzed By:	RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared By:	KV
			$\mathrm{RL}$			
Parameter		$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	Dilution	RL
Total Barium	1		0.0570	$\mathrm{mg/L}$	1	0.00500

Analytical Method: S 6010B

Prep Method: S 3010A

Laboratory: Lubbock

Ba, Total

Analysis:

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 108 of 352

HELSTF GROUNDWATER

Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Be, Total Analysis: Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Analysis: Cd, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Co, Total S 6010B QC Batch: 52279 Date Analyzed: Analyzed By: RR2008-09-11 Prep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Analysis: Cr, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 109 of 352

HELSTF GROUNDWATER

Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Analysis: Cu, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 52279 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Analysis: Hg, Total Analytical Method: S 7470A Prep Method: N/AQC Batch: 52287 Analyzed By:  $\mathrm{TP}$ Date Analyzed: 2008-09-11 Prep Batch: 44821 Sample Preparation: 2008-09-11 Prepared By: TP

RL

Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Ni, Total S 6010B QC Batch: 52279 Date Analyzed: Analyzed By: RR2008-09-11 Prep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Analysis: Pb, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 110 of 352

5 Work Grade: 6000020 HELSTF GROUNDWATER

Laboratory: Lubbock

Sb. Total Analysis: Analytical Method: S 6010B Prep Method: S 3010A QC Batch: Date Analyzed: 52279 2008-09-11 Analyzed By: RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

## Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Prep Method: S 3010A Analysis: Se, Total Analytical Method: S 6010B QC Batch: 52279 Date Analyzed: Analyzed By: 2008-09-11 RRPrep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

## Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Analytical Method: Prep Method: S 3010A Analysis: Sn. Total S 6010B QC Batch: 52279 Date Analyzed: Analyzed By: RR2008-09-11 Prep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

## Sample: 173045 - HLSF-0085-HCF-103-0908

Laboratory: Lubbock

Analysis: Tl, Total Analytical Method: S 6010B Prep Method: S 3010A QC Batch: 52279 Date Analyzed: Analyzed By: RR2008-09-11 Prep Batch: 44806 Sample Preparation: 2008-09-11 Prepared By: KV

RL

RL

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 111 of 352 65 HELSTF GROUNDWATER

00			nelsit Gro	UNDWATER		
Sample: 17	3045 - HL	SF-0085-HCF-1	03-0908			
Laboratory: Analysis: QC Batch: Prep Batch:	Lubbock V, Total 52279 44806		Analytical Method: Date Analyzed: Sample Preparation:	S 6010B 2008-09-11 2008-09-11	Prep Meth Analyzed Prepared I	By: RR
			m RL			
Parameter		Flag	Result	$\operatorname{Units}$	Dilution	RL
Total Vanadi	ium		0.0170	m mg/L	1	0.00500
Laboratory: Analysis: QC Batch:	Lubbock Zn, Total 52279	SF-0085-HCF-1	Analytical Method: Date Analyzed:	S 6010B 2008-09-11	Prep Meth Analyzed	By: RR
Prep Batch:	44806		Sample Preparation:	2008-09-11	Prepared 1	By: KV
Parameter Total Zinc		Flag	RL Result <0.00500	$\frac{\rm Units}{\rm mg/L}$	Dilution 1	RL 0.00500
Method Bl QC Batch: Prep Batch:	ank (1) 51313 44004	QC Batch: 5131	Date Analyzed: QC Preparation:	2008-08-11 2008-08-11		zed By: RR red By: KV
Parameter		Flag		IDL esult	$\operatorname{Units}$	m RL
Total Silver		riag	<0.000		mg/L	0.005
Method Bl QC Batch: Prep Batch:	ank (1) 51313 44004	QC Batch: 5131	3  Date Analyzed: QC Preparation:	2008-08-11 2008-08-11		zed By: RR red By: KV
Parameter		Flag		MDL tesult	${ m Units}$	m RL
Total Argoni		Tiag		00250	mg/I	0.01

< 0.00850

Total Arsenic

0.01

mg/L

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 112 of 352 65 HELSTF GROUNDWATER

		1122311 0100 0102 ((1112220			
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	RR
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Barium		< 0.00180	m mg/L		0.005
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	RR
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	$\operatorname{Units}$		RL
Total Beryllium		< 0.00120	m mg/L		0.002
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	RR
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Cadmium		< 0.00110	m mg/L		0.002
Method Blank (1)	QC Batch: 51313				
` '	&C Datch. 91919				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Cobalt		< 0.00170	m mg/L		0.002

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 113 of 352

65	,	HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Chromium		< 0.00201	m mg/L		0.005
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	RR
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
Danamatan	Elam	MDL Popula	IInita		DI
Parameter Total Copper	Flag	Result <0.00129	$\frac{\rm Units}{\rm mg/L}$		RL 0.005
Total Copper		***************************************	8/ 2		0.000
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	RR
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Nickel		< 0.00271	m mg/L		0.005
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	RR
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	$\operatorname{Result}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Lead		< 0.00460	m mg/L		0.005

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 114 of 352 65 HELSTF GROUNDWATER

05		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313 Prep Batch: 44004		Date Analyzed: 2008-08-11 QC Preparation: 2008-08-11		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	MDL Result	Units		RL
Total Antimony		< 0.0150	mg/L		0.02
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	RR
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	$\operatorname{Result}$	$\operatorname{Units}$		RL
Total Selenium		< 0.0106	m mg/L		0.02
Method Blank (1)	QC Batch: 51313	D			D.D.
QC Batch: 51313 Prep Batch: 44004		Date Analyzed: 2008-08-11 QC Preparation: 2008-08-11		Analyzed By: Prepared By:	$rac{ m RR}{ m KV}$
r		<b>V</b> - <b>P</b>		1 0	
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Tin		< 0.0597	m mg/L		0.1
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	RR
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	$\operatorname{Result}$	Units		RL

< 0.0223

mg/L

0.05

Total Thallium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 115 of 352 65 HELSTF GROUNDWATER

Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	RR
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	KV
-		-		-	
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Vanadium		< 0.00132	m mg/L		0.005
Method Blank (1)	QC Batch: 51313				
QC Batch: 51313		Date Analyzed: 2008-08-11		Analyzed By:	RR
Prep Batch: 44004		QC Preparation: 2008-08-11		Prepared By:	
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Zinc		< 0.000679	m mg/L		0.005
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427		Date Analyzed: 2008-08-14		Analyzed By:	RR
Prep Batch: 44089		QC Preparation: 2008-08-14		Prepared By:	
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Silver		< 0.000700	m mg/L		0.005
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427		Date Analyzed: 2008-08-14		Analyzed By:	RR
Prep Batch: 44089		QC Preparation: 2008-08-14		Prepared By:	
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Arsenic		< 0.00850	m mg/L		0.01

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 116 of 352
65 HELSTF GROUNDWATER

Method Blank (1)	QC Batch: 51427			
QC Batch: 51427		Date Analyzed: 2008-08-14		Analyzed By: RR
Prep Batch: 44089		QC Preparation: 2008-08-14		Prepared By: KV
•		•		1
		$\mathrm{MDL}$		
Parameter	$\operatorname{Flag}$	Result	Units	$\operatorname{RL}$
Total Barium		< 0.00180	$\mathrm{mg/L}$	0.005
Method Blank (1)	QC Batch: 51427			
QC Batch: 51427		Date Analyzed: 2008-08-14		Analyzed By: RR
Prep Batch: 44089		QC Preparation: 2008-08-14		Prepared By: KV
-				
		$\mathrm{MDL}$		
Parameter	Flag	$\operatorname{Result}$	$\operatorname{Units}$	RL
Total Beryllium		< 0.00120	m mg/L	0.002
Method Blank (1)	QC Batch: 51427			
QC Batch: 51427		Date Analyzed: 2008-08-14		Analyzed By: RR
Prep Batch: 44089		QC Preparation: 2008-08-14		Prepared By: KV
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	m RL
Total Cadmium		< 0.00110	mg/L	0.002
Method Blank (1)	QC Batch: 51427			
QC Batch: 51427		Date Analyzed: 2008-08-14		Analyzed By: RR
Prep Batch: 44089		QC Preparation: 2008-08-14		Prepared By: KV
		$\mathrm{MDL}$		
Parameter	Flag	Result	$\operatorname{Units}$	$\mathrm{RL}$
Total Cobalt		<0.00170	m.c./T	0.002

< 0.00170

mg/L

0.002

Total Cobalt

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 117 of 352 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
Parameter Total Chromium	Flag	MDL Result <0.00201	$\begin{array}{c} \text{Units} \\ \text{mg/L} \end{array}$		RL 0.005
10tai Ciiroiniuiii		\0.00201	mg/L		0.000
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
D	El	MDL	IIi		DI
Parameter Total Copper	Flag	Result <0.00129	$\frac{\rm Units}{\rm mg/L}$		RL 0.005
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Nickel	0	< 0.00271	$\mathrm{mg/L}$		0.005
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	${ m Units}$		$\operatorname{RL}$
Total Lead	0	< 0.00460	m mg/L		0.005

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 118 of 352 HELSTE GROUNDWATER.

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	MDL Result	Units		RL
Total Antimony		< 0.0150	m mg/L		0.02
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\mathrm{RL}$
Total Selenium		< 0.0106	m mg/L		0.02
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
		$\mathrm{MDL}$			
Parameter Total Tin	Flag	Result < 0.0597	Units mg/I		$\frac{RL}{0.1}$
Total IIII		<0.0391	m mg/L		0.1
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\mathrm{RL}$
Total Thallium	J	< 0.0223	m mg/L		0.05

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 119 of 352 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
Parameter T-t-1 V-n-discus	Flag	MDL Result	Units		RL
Total Vanadium		< 0.00132	m mg/L		0.005
Method Blank (1)	QC Batch: 51427				
QC Batch: 51427 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
_		$_{ m MDL}$			
Parameter Total Zinc	Flag	Result <0.000679	$\frac{ m Units}{ m mg/L}$		$\frac{\mathrm{RL}}{0.005}$
Method Blank (1)	QC Batch: 51429				
QC Batch: 51429 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Silver		< 0.000700	m mg/L		0.005
Method Blank (1)	QC Batch: 51429				
QC Batch: 51429 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
Danamatan	171	MDL Possilt	TT:		Dī
Parameter Total Arsenic	Flag	Result < 0.00850	$rac{ m Units}{ m mg/L}$		RL 0.01
Total Albeille		\0.0009U	mg/ L		0.01

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 120 of 352 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51429				
QC Batch: 51429 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
_		$^{ m MDL}$			
Parameter Total Barium	Flag	Result <0.00180	Units		RL 0.005
Total Barium		<0.00100	m mg/L		0.005
Method Blank (1)	QC Batch: 51429				
QC Batch: 51429 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	$rac{RR}{KV}$
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Beryllium		< 0.00120	m mg/L		0.002
Method Blank (1)	QC Batch: 51429				
QC Batch: 51429 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: Prepared By:	RR KV
1 1ep <b>D</b> aten. 44009		Q∪ 1 Teparation. 2000-00-14		r repared by.	IX V
		MDL			
Parameter	Flag	Result	Units		RL
Total Cadmium		< 0.00110	m mg/L		0.002
Method Blank (1)	QC Batch: 51429				
QC Batch: 51429		Date Analyzed: 2008-08-14		Analyzed By:	RR
Prep Batch: 44089		QC Preparation: 2008-08-14		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Cobalt		< 0.00170	m mg/L		0.002

Report Date: October 7, 2008

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 121 of 352

RL

0.005

mg/L

5 HELSTF GROUNDWATER

Method Blank (1) QC Batch: 51429

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

 $\mathrm{MDL}$ 

 $\begin{array}{c|ccccc} Parameter & Flag & Result & Units & RL \\ \hline Total Chromium & <0.00201 & mg/L & 0.005 \\ \end{array}$ 

Method Blank (1) QC Batch: 51429

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MDL

Method Blank (1) QC Batch: 51429

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

< 0.00271

MDL Parameter Flag Result Units

Method Blank (1) QC Batch: 51429

Total Nickel

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

 Report Date: October 7, 2008

Work Order: 8080828
HELSTE GROUNDWATER

Page Number: 122 of 352

5 HELSTF GROUNDWATER

Method Blank (1) QC Batch: 51429

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

 $\mathrm{MDL}$ 

Method Blank (1) QC Batch: 51429

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

 $\mathrm{MDL}$ 

Method Blank (1) QC Batch: 51429

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

< 0.0597

mg/L

0.1

Method Blank (1) QC Batch: 51429

Total Tin

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 123 of 352 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER		
Method Blank (1)	QC Batch: 51429			
QC Batch: 51429 Prep Batch: 44089		Date Analyzed:         2008-08-14           QC Preparation:         2008-08-14		Analyzed By: RR Prepared By: KV
Parameter Total Vanadium	Flag	MDL Result <0.00132	Units	RL 0.005
Total vanadium		< 0.00132	m mg/L	0.005
Method Blank (1)	QC Batch: 51429			
QC Batch: 51429 Prep Batch: 44089		Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14		Analyzed By: RR Prepared By: KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$	m RL
Total Zinc		< 0.000679	m mg/L	0.005
Method Blank (1)	QC Batch: 51475			
QC Batch: 51475 Prep Batch: 44137		Date Analyzed:         2008-08-15           QC Preparation:         2008-08-15		Analyzed By: TP Prepared By: TP
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	Units	m RL
Total Mercury		< 0.0000251	m mg/L	0.0002
Method Blank (1)	QC Batch: 51617			
QC Batch: 51617 Prep Batch: 44217		Date Analyzed:         2008-08-20           QC Preparation:         2008-08-19		Analyzed By: RR Prepared By: KV
Parameter	Flag	MDL Result	Units	RL
Total Silver		< 0.000700	m mg/L	0.005

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 124 of 352 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$egin{array}{c}  ext{MDL} \  ext{Result} \end{array}$	$\operatorname{Units}$		$\mathrm{RL}$
Total Arsenic	O	< 0.00850	m mg/L		0.01
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		m RL
Total Barium		< 0.00180	m mg/L		0.005
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\mathrm{RL}$
Total Beryllium	3	< 0.00120	m mg/L		0.002
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	${ m Units}$		$\operatorname{RL}$
Total Cadmium		< 0.00110	${ m mg/L}$		0.002

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 125 of 352
65 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter T-+-1 C-1-1	Flag	MDL Result	Units		RL
Total Cobalt		< 0.00170	m mg/L		0.002
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Chromium		< 0.00201	m mg/L		0.005
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Copper	0	< 0.00129	m mg/L		0.005
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed:         2008-08-20           QC Preparation:         2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Nickel	1 1005	< 0.00271	mg/L		0.005

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 126 of 352

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617		Date Analyzed: 2008-08-20		Analyzed By:	RR
Prep Batch: 44217		QC Preparation: 2008-08-19		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Lead		< 0.00460	m mg/L		0.005
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617		Date Analyzed: 2008-08-20		Analyzed By:	RR
Prep Batch: 44217		QC Preparation: 2008-08-19		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	$\operatorname{Units}$		RL
Total Antimony		< 0.0150	m mg/L		0.02
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617		Date Analyzed: 2008-08-20		Analyzed By:	RR
Prep Batch: 44217		QC Preparation: 2008-08-19		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	$\operatorname{Units}$		RL
Total Selenium		< 0.0106	$\mathrm{mg/L}$		0.02
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617		Date Analyzed: 2008-08-20		Analyzed By:	RR
Prep Batch: 44217		QC Preparation: 2008-08-19		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	$\operatorname{Result}$	$\operatorname{Units}$		RL
Total Tin		< 0.0597	${ m mg/L}$		0.1

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 127 of 352 65 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter Total Thallium	Flag	MDL Result <0.0223	$rac{ m Units}{ m mg/L}$		RL 0.05
		V0.0229	mg/L		0.00
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter	Flag	MDL Result	${ m Units}$		$\mathrm{RL}$
Total Vanadium		< 0.00132	$\mathrm{mg/L}$		0.005
Method Blank (1)	QC Batch: 51617				
QC Batch: 51617 Prep Batch: 44217		Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	$_{ m Units}$		RL
Total Zinc		< 0.000679	m mg/L		0.005
Method Blank (1)	QC Batch: 51695				
QC Batch: 51695 Prep Batch: 44317		Date Analyzed: 2008-08-22 QC Preparation: 2008-08-22		Analyzed By: Prepared By:	RR KV
Parameter	Flag	MDL Result	Units		RL
Total Silver		< 0.000700	m mg/L		0.005

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 128 of 352 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51695				
QC Batch: 51695 Prep Batch: 44317		Date Analyzed: 2008-08-22 QC Preparation: 2008-08-22		Analyzed By: Prepared By:	RR KV
Parameter Total Arsenic	Flag	MDL Result <0.00850	$\frac{\rm Units}{\rm mg/L}$		RL 0.01
Total Alseine		<u> </u>	mg/ L		0.01
Method Blank (1)	QC Batch: 51695				
QC Batch: 51695 Prep Batch: 44317		Date Analyzed: 2008-08-22 QC Preparation: 2008-08-22		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Barium		< 0.00180	m mg/L		0.005
Method Blank (1)	QC Batch: 51695				
QC Batch: 51695 Prep Batch: 44317		Date Analyzed: 2008-08-22 QC Preparation: 2008-08-22		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	Units		RL
Total Beryllium		< 0.00120	m mg/L		0.002
Method Blank (1)	QC Batch: 51695				
QC Batch: 51695 Prep Batch: 44317		Date Analyzed:         2008-08-22           QC Preparation:         2008-08-22		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		m RL
Total Cadmium	0	< 0.00110	m mg/L		0.002

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 129 of 352

65	,	HELSTF GROUNDWATER		
Method Blank (1)	QC Batch: 51695			
QC Batch: 51695		Date Analyzed: 2008-08-22		Analyzed By: RR
Prep Batch: 44317		QC Preparation: 2008-08-22		Prepared By: KV
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	RL
Total Cobalt		< 0.00170	m mg/L	0.002
Method Blank (1)	QC Batch: 51695			
QC Batch: 51695		Date Analyzed: 2008-08-22		Analyzed By: RR
Prep Batch: 44317		QC Preparation: 2008-08-22		Prepared By: KV
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	$\operatorname{RL}$
Total Chromium		< 0.00201	m mg/L	0.005
Method Blank (1)	QC Batch: 51695			
QC Batch: 51695		Date Analyzed: 2008-08-22		Analyzed By: RR
Prep Batch: 44317		QC Preparation: 2008-08-22		Prepared By: KV
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	RL
Total Copper		< 0.00129	m mg/L	0.005
Method Blank (1)	QC Batch: 51695			
QC Batch: 51695		Date Analyzed: 2008-08-22		Analyzed By: RR
Prep Batch: 44317		QC Preparation: 2008-08-22		Prepared By: KV
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	RL
Total Nickel		< 0.00271	${ m mg/L}$	0.005

Report Date: October 7, 2008 Work Order: 8080828

5 HELSTF GROUNDWATER

Method Blank (1) QC Batch: 51695

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

Page Number: 130 of 352

 $\mathrm{MDL}$ 

Method Blank (1) QC Batch: 51695

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

 $\operatorname{MDL}$ 

Method Blank (1) QC Batch: 51695

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

Method Blank (1) QC Batch: 51695

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 131 of 352 HELSTF GROUNDWATER Method Blank (1) QC Batch: 51695 QC Batch: 51695Date Analyzed: 2008-08-22 Analyzed By: RR Prep Batch: QC Preparation: 2008-08-22 Prepared By: KV44317MDLParameter Flag  ${\bf Result}$ Units RL< 0.0223 Total Thallium mg/L0.05Method Blank (1) QC Batch: 51695 QC Batch: 51695Date Analyzed: 2008-08-22 Analyzed By: RR Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV MDLParameter Flag Result Units RLTotal Vanadium < 0.00132 mg/L0.005Method Blank (1) QC Batch: 51695 QC Batch: Date Analyzed: 2008-08-22 Analyzed By: RR 51695Prep Batch: 44317QC Preparation: 2008-08-22 Prepared By: KV

		$\mathrm{MDL}$		
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	${ m Units}$	$\operatorname{RL}$
Total Zinc		< 0.000679	m mg/L	0.005

Method Blank (1)

51771

QC Batch:

QC Batch: 51771

Prep Batch: 44397		QC Preparation:	2008-08-25		Prepared By:	TP
			MDL			
Parameter	Flag		$\operatorname{Result}$	$\operatorname{Units}$		RL
Total Mercury		< 0.00	000251	$\mathrm{mg/L}$	(	0.0002

2008-08-25

Analyzed By: TP

Date Analyzed:

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 132 of 352 HELSTF GROUNDWATER Method Blank (1) QC Batch: 51772 QC Batch: 51772Date Analyzed: 2008-08-25Analyzed By: TPPrep Batch: QC Preparation: 2008-08-25Prepared By: TP44397MDL Parameter Flag Result Units RLTotal Mercury < 0.0000251 mg/L0.0002Method Blank (1) QC Batch: 51793 QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV MDLParameter Result Units RLFlag Total Silver < 0.000700 mg/L0.005Method Blank (1) QC Batch: 51793 QC Batch: Date Analyzed: 2008-08-26 Analyzed By: RR 51793 Prep Batch: 44405QC Preparation: 2008-08-26 Prepared By: KVMDLParameter Result Units Flag RL< 0.00850 Total Arsenic mg/L0.01Method Blank (1) QC Batch: 51793

Date Analyzed:

Flag

QC Preparation: 2008-08-26

2008-08-26

MDL

Result

< 0.00180

Analyzed By:

Prepared By:

Units

mg/L

RR

KV

RL

0.005

QC Batch:

Parameter

Total Barium

Prep Batch:

51793

44405

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 133 of 352 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793 Prep Batch: 44405		Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26		Analyzed By: Prepared By:	RR KV
Parameter T-4-1 Parallisms	Flag	MDL Result	Units		RL
Total Beryllium		< 0.00120	m mg/L		0.002
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793 Prep Batch: 44405		Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$ootnotesize  ext{MDL}$ Result	$\operatorname{Units}$		$\operatorname{RL}$
Total Cadmium		< 0.00110	m mg/L		0.002
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793 Prep Batch: 44405		Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Cobalt	1 146	<0.00170	mg/L		0.002
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793 Prep Batch: 44405		Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Chromium	8	< 0.00201	m mg/L		0.005

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 134 of 352 65 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793 Prep Batch: 44405		Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26		Analyzed By: Prepared By:	RR KV
		$\mathrm{MDL}$			
Parameter Total Copper	Flag	Result <0.00129	Units		$\frac{RL}{0.005}$
Total Copper		<0.00129	m mg/L		0.005
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793		Date Analyzed: 2008-08-26		Analyzed By:	RR
Prep Batch: 44405		QC Preparation: 2008-08-26		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter Total Nickel	Flag	Result <0.00271	$\frac{\rm Units}{\rm mg/L}$		$\frac{\mathrm{RL}}{0.005}$
13300 1110101		(0.00 <b>2</b> )	8/ =		0.000
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793		Date Analyzed: 2008-08-26		Analyzed By:	
Prep Batch: 44405		QC Preparation: 2008-08-26		Prepared By:	KV
		MDL			
Parameter Total Lead	Flag	Result <0.00460	Units		RL
Total Lead		<0.00400	m mg/L		0.005
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793		Date Analyzed: 2008-08-26		Analyzed By:	RR
Prep Batch: 44405		QC Preparation: 2008-08-26		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL

< 0.0150

mg/L

0.02

Total Antimony

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 135 of 352 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793 Prep Batch: 44405		Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26		Analyzed By: Prepared By:	RR KV
Parameter Total Selenium	Flag	MDL Result <0.0106	Units mg/L		RL 0.02
Total Selemum		<b>\(\tau_{0.0100}\)</b>	nig/ L		0.02
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793 Prep Batch: 44405		Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$egin{array}{c}  ext{MDL} \  ext{Result} \end{array}$	$\operatorname{Units}$		$\mathrm{RL}$
Total Tin	-	< 0.0597	m mg/L		0.1
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793 Prep Batch: 44405		Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	Units		RL
Total Thallium		< 0.0223	m mg/L		0.05
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793 Prep Batch: 44405		Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		m RL
Total Vanadium		< 0.00132	m mg/L		0.005

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 136 of 352
HELSTE GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51793				
QC Batch: 51793		Date Analyzed: 2008-08-26		Analyzed By:	RR
Prep Batch: 44405		QC Preparation: 2008-08-26		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$		RL
Total Zinc		< 0.000679	m mg/L		0.005
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924		Date Analyzed: 2008-08-29		Analyzed By:	RR
Prep Batch: 44510		QC Preparation: 2008-08-29		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Silver		< 0.000700	m mg/L		0.005
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924		Date Analyzed: 2008-08-29		Analyzed By:	RR
Prep Batch: 44510		QC Preparation: 2008-08-29		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Arsenic		< 0.00850	m mg/L		0.01
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924		Date Analyzed: 2008-08-29		Analyzed By:	RR
Prep Batch: 44510		QC Preparation: 2008-08-29		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Barium		< 0.00180	m mg/L		0.005

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 137 of 352
HELSTE GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924		Date Analyzed: 2008-08-29		Analyzed By:	
Prep Batch: 44510		QC Preparation: 2008-08-29		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	$\operatorname{Result}$	$\operatorname{Units}$		RL
Total Beryllium		< 0.00120	m mg/L		0.002
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924		Date Analyzed: 2008-08-29		Analyzed By:	RR
Prep Batch: 44510		QC Preparation: 2008-08-29		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Cadmium		< 0.00110	m mg/L		0.002
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924		Date Analyzed: 2008-08-29		Analyzed By:	RR
Prep Batch: 44510		QC Preparation: 2008-08-29		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Cobalt		< 0.00170	m mg/L		0.002
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924		Date Analyzed: 2008-08-29		Analyzed By:	RR
Prep Batch: 44510		QC Preparation: 2008-08-29		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Chromium		< 0.00201	m mg/L		0.005

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 138 of 352 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924 Prep Batch: 44510		Date Analyzed: 2008-08-29 QC Preparation: 2008-08-29		Analyzed By: Prepared By:	RR KV
		$\mathrm{MDL}$			
Parameter Total Copper	Flag	Result <0.00129	Units		RL 0.005
Total Copper		<0.00129	m mg/L		0.005
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924		Date Analyzed: 2008-08-29		Analyzed By:	
Prep Batch: 44510		QC Preparation: 2008-08-29		Prepared By:	KV
<b>.</b>	771	MDL	TT 1.		D.I.
Parameter Total Nickel	Flag	Result <0.00271	$\frac{\rm Units}{\rm mg/L}$		RL 0.005
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924 Prep Batch: 44510		Date Analyzed: 2008-08-29 QC Preparation: 2008-08-29		Analyzed By: Prepared By:	RR KV
		$\mathrm{MDL}$			
Parameter	$\operatorname{Flag}$	Result	Units		RL
Total Lead		< 0.00460	m mg/L		0.005
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924		Date Analyzed: 2008-08-29		Analyzed By:	RR
Prep Batch: 44510		QC Preparation: 2008-08-29		Prepared By:	KV
		MDL			
Parameter	Flag	Result	Units		RL
Total Antimony		< 0.0150	m mg/L		0.02

Report Date: October 7, 2008 Work Order: 8080828
65 HELSTE GROUNDWATER

Method Blank (1)         QC Batch: 51924         Date Analyzed: 2008-08-29         Analyzed: Prep Batch: 44510         Date Analyzed: 2008-08-29         Analyzed: Prepare	מת מנ
Preparet   Preparet   Preparet   Preparet	מת מנ
MDL   Total Selenium   Flag   Result   Units	
Parameter         Flag         Result         Units           Total Selenium         < 0.0106	ed By: KV
Total Selenium	
Method Blank (1) QC Batch: 51924  QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed: Prep Batch: 44510 QC Preparation: 2008-08-29 Prepare  MDL Parameter Flag Result Units	RL
QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed: Prep Batch: 44510 QC Preparation: 2008-08-29 Prepare  MDL  Parameter Flag Result Units	0.02
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepare  MDL  Parameter Flag Result Units	
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepare  MDL  Parameter Flag Result Units	ed By: RR
MDL Parameter Flag Result Units	
Parameter Flag Result Units	
0	
Total Tin <0.0597 mg/L	RL
	0.1
Method Blank (1) QC Batch: 51924	
QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed	ed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Preparation	
2 topacon 11010 QC 110paconom 2000 00 20	a 29, 12,
$\mathrm{MDL}$	
Parameter Flag Result Units	RL
Total Thallium <0.0223 mg/L	0.05
Method Blank (1) QC Batch: 51924	
QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed	ed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepare	
$\mathrm{MDL}$	
Parameter Flag Result Units	$\operatorname{RL}$
Total Vanadium <0.00132 mg/L	0.005

Page Number: 139 of 352

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 140 of 352

HELSTE GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 51924				
QC Batch: 51924		Date Analyzed: 2008-08-29		Analyzed By:	
Prep Batch: 44510		QC Preparation: 2008-08-29		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$		RL
Total Zinc		< 0.000679	m mg/L		0.005
Method Blank (1)	QC Batch: 52016				
QC Batch: 52016		Date Analyzed: 2008-09-03		Analyzed By:	RR
Prep Batch: 44581		QC Preparation: 2008-09-03		Prepared By:	KV
_		$\mathop{\mathrm{MDL}}_{-}$			
Parameter	Flag	Result	Units		RL
Total Silver		< 0.000700	m mg/L		0.005
Method Blank (1)	QC Batch: 52016				
QC Batch: 52016		Date Analyzed: 2008-09-03		Analyzed By:	RR
Prep Batch: 44581		QC Preparation: 2008-09-03		Prepared By:	KV
		MDL			
Parameter	Flag	Result	Units		RL
Total Arsenic		< 0.00850	m mg/L		0.01
Method Blank (1)	QC Batch: 52016				
QC Batch: 52016		Date Analyzed: 2008-09-03		Analyzed By:	RR
Prep Batch: 44581		QC Preparation: 2008-09-03		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Barium		< 0.00180	m mg/L		0.005

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 141 of 352 65 HELSTF GROUNDWATER

		HEESTI GROONDWITER			
Method Blank (1)	QC Batch: 52016				
QC Batch: 52016		Date Analyzed: 2008-09-03		Analyzed By:	RR
Prep Batch: 44581		QC Preparation: 2008-09-03		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	$\operatorname{Result}$	$\operatorname{Units}$		RL
Total Beryllium		< 0.00120	m mg/L		0.002
Method Blank (1)	QC Batch: 52016				
` ,	&C Batteri. 92010				
QC Batch: 52016 Prep Batch: 44581		Date Analyzed: 2008-09-03 QC Preparation: 2008-09-03		Analyzed By:	$rac{ ext{RR}}{ ext{KV}}$
Prep Batch: 44581		QC Preparation: 2008-09-03		Prepared By:	ΚV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Cadmium		< 0.00110	mg/L		0.002
Method Blank (1)	QC Batch: 52016				
QC Batch: 52016		Date Analyzed: 2008-09-03		Analyzed By:	RR
Prep Batch: 44581		QC Preparation: 2008-09-03		Prepared By:	KV
_		$\mathop{\mathrm{MDL}}_{-}$			
Parameter Total Cobalt	Flag	Result < 0.00170	Units		$\frac{\mathrm{RL}}{0.002}$
Total Copait		<0.00170	m mg/L		0.002
Method Blank (1)	QC Batch: 52016				
, ,	QC Datcii. 52010				
QC Batch: 52016		Date Analyzed: 2008-09-03		Analyzed By:	
Prep Batch: 44581		QC Preparation: 2008-09-03		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	$\operatorname{Result}$	Units		RL

< 0.00201

mg/L

0.005

Total Chromium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 142 of 352 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 52016				
QC Batch: 52016 Prep Batch: 44581		Date Analyzed: 2008-09-03 QC Preparation: 2008-09-03		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	MDL Result	Units		RL
Total Copper		< 0.00129	mg/L		0.005
Method Blank (1)	QC Batch: 52016				
QC Batch: 52016 Prep Batch: 44581		Date Analyzed: 2008-09-03 QC Preparation: 2008-09-03		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$ootnotesize  ext{MDL}$ Result	${ m Units}$		m RL
Total Nickel		< 0.00271	m mg/L		0.005
Method Blank (1)	QC Batch: 52016				
QC Batch: 52016 Prep Batch: 44581		Date Analyzed: 2008-09-03 QC Preparation: 2008-09-03		Analyzed By: Prepared By:	RR KV
		$\mathrm{MDL}$			
Parameter Total Lead	Flag	Result <0.00460	$\frac{\rm Units}{\rm mg/L}$		RL 0.005
Total Lead		<0.00400	mg/L		0.005
Method Blank (1)	QC Batch: 52016				
QC Batch: 52016 Prep Batch: 44581		Date Analyzed: 2008-09-03 QC Preparation: 2008-09-03		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		m RL
Total Antimony	1 148	<0.0150	$\frac{\mathrm{cmcs}}{\mathrm{mg/L}}$		0.02

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 143 of 352 HELSTF GROUNDWATER

	HEESTI GROONDWITER			
QC Batch: 52016				
	Date Analyzed: 2008-09-03		Analyzed By:	RR
	QC Preparation: 2008-09-03		Prepared By:	KV
	$\mathrm{MDL}$			
Flag	$\operatorname{Result}$	$\operatorname{Units}$		RL
	< 0.0106	m mg/L		0.02
QC Batch: 52016				
	Data Analyzadi 2008 00 02		Analyzad Day	RR
	· ·			кк KV
	€€ 1 reparation. 2000-05-05		r repared by.	IX V
	$\mathrm{MDL}$			
Flag				RL
	< 0.0597	mg/L		0.1
QC Batch: 52016				
	Date Analyzed: 2008-09-03		Analyzed By:	RR
	QC Preparation: 2008-09-03		Prepared By:	KV
	MDI.			
Flag		Units		RL
	< 0.0223	mg/L		0.05
QC Batch: 52016				
	Date Analyzed: 2008-09-03		Analyzed By:	RR
	QC Preparation: 2008-09-03		Prepared By:	KV
	$\mathrm{MDL}$			
Flag	Result	Units		RL
	Flag  QC Batch: 52016  Flag  QC Batch: 52016  Flag	QC Batch: 52016       Date Analyzed: 2008-09-03 2008-09-03         MDL Result       Analyzed: 2008-09-03         QC Batch: 52016       Date Analyzed: 2008-09-03 2008-09-03         MDL Result       Analyzed: 2008-09-03 2008-09-03         MDL Result       Analyzed: 2008-09-03         QC Batch: 52016       Analyzed: 2008-09-03 2008-09-03         MDL Result       Analyzed: 2008-09-03 2008-09-03         QC Batch: 52016       Analyzed: 2008-09-03 2008-09-03         QC Batch: 52016       Analyzed: 2008-09-03 2008-09-03         QC Preparation: 2008-09-03 2008-09-03       Analyzed: 2008-09-03 2008-09-03         MDL MDL       Analyzed: 2008-09-03 2008-09-03         MDL MDL       Analyzed: 2008-09-03 2008-09-03         MDL MDL       Analyzed: 2008-09-03 2008-09-03	Date Analyzed: 2008-09-03   WIDL   Units	QC Batch: 52016           Date Analyzed: QC Preparation:         2008-09-03 2008-09-03         Analyzed By: Prepared By: Prepared By: Prepared By:           MDL Result         Units           QC Batch: 52016         Date Analyzed: 2008-09-03 QC Preparation: 2008-09-03 QC Preparation: 2008-09-03 Prepared By: Prepared By:           QC Batch: 52016         Result Units           QC Batch: 52016         Units           QC Preparation: 2008-09-03 QC Preparation: 2008-09-03 QC Preparation: 2008-09-03 Prepared By: Prepared By:           QC Batch: 52016         MDL Result Units           QC Batch: 52016         Units           Prepared By: Analyzed: 2008-09-03 QC Preparation: 2008-09-03 Prepared By: Prepared By: MDL           QC Batch: 52016         MDL           MDL Prepared By: MDL         Units           QC Batch: 52016         Analyzed By: Prepared By

< 0.00132

mg/L

0.005

Total Vanadium

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 144 of 352

HELSTE GROUNDWATER

65		HELSTF GROUNDWATER		
Method Blank (1)	QC Batch: 52016			
QC Batch: 52016		Date Analyzed: 2008-09-03		Analyzed By: RR
Prep Batch: 44581		QC Preparation: 2008-09-03		Prepared By: KV
		$\mathrm{MDL}$		
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	RL
Total Zinc		< 0.000679	m mg/L	0.005
Method Blank (1)	QC Batch: 52084			
QC Batch: 52084		Date Analyzed: 2008-09-04		Analyzed By: TP
Prep Batch: 44653		QC Preparation: 2008-09-04		Prepared By: TP
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	RL
Total Mercury		< 0.0000251	m mg/L	0.0002
Method Blank (1)	QC Batch: 52085			
QC Batch: 52085		Date Analyzed: 2008-09-04		Analyzed By: TP
Prep Batch: 44653		QC Preparation: 2008-09-04		Prepared By: TP
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	RL
Total Mercury		< 0.0000251	m mg/L	0.0002
Method Blank (1)	QC Batch: 52131			
QC Batch: 52131		Date Analyzed: 2008-09-08		Analyzed By: RR
Prep Batch: 44662		QC Preparation: 2008-09-05		Prepared By: KV
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	RL
Total Silver		< 0.000700	m mg/L	0.005

Report Date: October 7, 2008 Work Order: 8080828 65 HELSTF GROUNDWATER

QC Batch: 52131

Flag

Method Blank (1)

52131

44662

QC Batch:

Parameter

Total Cadmium

Prep Batch:

Method Blank (1) QC Batch: 52131 QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RRPrep Batch: 44662QC Preparation: 2008-09-05 Prepared By: KVMDLParameter Result Units RLFlag Total Arsenic < 0.00850mg/L0.01 Method Blank (1) QC Batch: 52131 QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR Prep Batch: 44662QC Preparation: 2008-09-05 Prepared By: KVMDL Parameter Flag Result Units RLTotal Barium < 0.00180 mg/L0.005Method Blank (1) QC Batch: 52131 QC Batch: Date Analyzed: 2008-09-08 Analyzed By: RR 52131 Prep Batch: 44662QC Preparation: 2008-09-05 Prepared By: KVMDLParameter Result RLFlag Units Total Beryllium < 0.00120 mg/L0.002

Date Analyzed:

QC Preparation:

2008-09-08

2008-09-05

MDL

Result

< 0.00110

Page Number: 145 of 352

Analyzed By:

Prepared By:

Units

mg/L

RR

KV

RL

0.002

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 146 of 352 65 HELSTF GROUNDWATER

09		HELSIF GROUNDWATER			
Method Blank (1)	QC Batch: 52131				
QC Batch: 52131		Date Analyzed: 2008-09-08		Analyzed By:	RR
Prep Batch: 44662		QC Preparation: 2008-09-05		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	$\operatorname{Result}$	Units		RL
Total Cobalt		< 0.00170	m mg/L		0.002
Method Blank (1)	QC Batch: 52131				
QC Batch: 52131		Date Analyzed: 2008-09-08		Analyzed By:	RR
Prep Batch: 44662		QC Preparation: 2008-09-05		Prepared By:	KV
		MDL			
Parameter Total Chromium	Flag	Result < 0.00201	$\frac{ m Units}{ m mg/L}$		RL 0.005
Method Blank (1)	QC Batch: 52131				
QC Batch: 52131	&C Daten. 92131	Date Analyzed: 2008-09-08		Analyzed By:	RR
Prep Batch: 44662		QC Preparation: 2008-09-05		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Copper		< 0.00129	m mg/L		0.005
Method Blank (1)	QC Batch: 52131				
QC Batch: 52131		Date Analyzed: 2008-09-08		Analyzed By:	RR
Prep Batch: 44662		QC Preparation: 2008-09-05		Prepared By:	KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Nickel		< 0.00271	$\mathrm{mg/L}$		0.005

Parameter

Total Tin

Flag

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 147 of 352

Method Blank (1) QC Batch: 52131 QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR Prep Batch: 44662QC Preparation: 2008-09-05 Prepared By: KVMDLParameter Flag Result Units RLTotal Lead < 0.00460mg/L0.005Method Blank (1) QC Batch: 52131 QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KVMDLParameter Result Units RLFlag Total Antimony < 0.0150mg/L 0.02Method Blank (1) QC Batch: 52131 QC Batch: Date Analyzed: 2008-09-08 Analyzed By: RR 52131 Prep Batch: 44662QC Preparation: 2008-09-05 Prepared By: KVMDLParameter Result Units Flag RL< 0.0106 Total Selenium mg/L0.02Method Blank (1) QC Batch: 52131 QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RRPrep Batch: 44662QC Preparation: 2008-09-05 Prepared By: KV

MDL

Result

< 0.0597

Units

mg/L

RL

0.1

Report Date: October 7, 2008 Work Order: 8080828

65		HELSTF GROUNDWATER		80 (validoci) 110 01 002
Method Blank (1)	QC Batch: 52131			
QC Batch: 52131		Date Analyzed: 2008-09-08		Analyzed By: RR
Prep Batch: 44662		QC Preparation: 2008-09-05		Prepared By: KV
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	RL
Total Thallium		< 0.0223	m mg/L	0.05
Method Blank (1)	QC Batch: 52131			
, ,		Date Analyzed: 2008-09-08		Analyzad Day DD
QC Batch: 52131 Prep Batch: 44662		Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05		Analyzed By: RR Prepared By: KV
110p Batteri. 11002		QC 1 Toparation. 2000 00 00		r repared By. III
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	RL
Total Vanadium		< 0.00132	m mg/L	0.005
Method Blank (1)	QC Batch: 52131			
QC Batch: 52131		Date Analyzed: 2008-09-08		Analyzed By: RR
Prep Batch: 44662		QC Preparation: 2008-09-05		Prepared By: KV
		$\mathrm{MDL}$		
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{RL}$
Total Zinc		< 0.000679	m mg/L	0.005
Method Blank (1)	QC Batch: 52201			
QC Batch: 52201		Date Analyzed: 2008-09-09		Analyzed By: RR
Prep Batch: 44736		QC Preparation: 2008-09-09		Prepared By: KV
		MDI		
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	Units	m RL
Total Silver	0	< 0.000700	$\frac{\rm mg/L}$	0.005

Page Number: 148 of 352

Work Order: 8080828

Page Number: 149 of 352 HELSTF GROUNDWATER

Method Blank (1	L)	QC Batch:	52201
-----------------	----	-----------	-------

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RRPrep Batch: QC Preparation: 2008-09-09 Prepared By: KV44736

MDL

Parameter Result Units RLFlag Total Arsenic < 0.00850mg/L0.01

#### Method Blank (1) QC Batch: 52201

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

MDL Parameter Flag Result Units RLTotal Barium < 0.00180 mg/L0.005

#### Method Blank (1) QC Batch: 52201

QC Batch: Date Analyzed: 2008-09-09 Analyzed By: RR 52201 Prep Batch: 44736QC Preparation: 2008-09-09 Prepared By: KV

MDLParameter Result Units RLFlag Total Beryllium < 0.00120 mg/L0.002

#### Method Blank (1) QC Batch: 52201

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR Prep Batch: 44736QC Preparation: 2008-09-09 Prepared By: KV

MDLParameter Flag Result Units RLTotal Cadmium < 0.00110 mg/L 0.002 Report Date: October 7, 2008 Work Order: 8080828
65 HELSTE GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 52201				
QC Batch: 52201 Prep Batch: 44736		Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09		Analyzed By: Prepared By:	RR KV
		MDL			
Parameter Total Cobalt	Flag	Result <0.00170	Units		$\frac{\mathrm{RL}}{0.002}$
Total Cobalt		<0.00170	m mg/L		0.002
Method Blank (1)	QC Batch: 52201				
QC Batch: 52201		Date Analyzed: 2008-09-09		Analyzed By:	RR
Prep Batch: 44736		QC Preparation: 2008-09-09		Prepared By:	KV
_		$_{ m D}^{ m MDL}$			
Parameter Total Chromium	Flag	Result < 0.00201	$\frac{\rm Units}{\rm mg/L}$		$\frac{\mathrm{RL}}{0.005}$
Method Blank (1)	QC Batch: 52201				
QC Batch: 52201 Prep Batch: 44736		Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09		Analyzed By: Prepared By:	RR KV
		$\mathrm{MDL}$			
Parameter	Flag	Result	Units		RL
Total Copper		< 0.00129	m mg/L		0.005
Method Blank (1)	QC Batch: 52201				
QC Batch: 52201		Date Analyzed: 2008-09-09		Analyzed By:	RR
Prep Batch: 44736		QC Preparation: 2008-09-09		Prepared By:	KV
		MDL	<b>.</b>		T
Parameter T-t-1 Ni-l-1	Flag	Result	Units		RL
Total Nickel		< 0.00271	m mg/L		0.005

Page Number: 150 of 352

Work Order: 8080828 HELSTF GROUNDWATER

Page Number: 151 of 352

Method Blank (1) QC Batch: 52201 QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR Prep Batch: QC Preparation: 2008-09-09 Prepared By: KV44736MDLParameter Flag Result Units RLTotal Lead < 0.00460mg/L0.005Method Blank (1) QC Batch: 52201 QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KVMDL

Parameter Result Units RLFlag Total Antimony < 0.0150mg/L 0.02

Method Blank (1) QC Batch: 52201

QC Batch: Date Analyzed: 2008-09-09 Analyzed By: RR 52201 Prep Batch: 44736QC Preparation: 2008-09-09 Prepared By: KV

MDLParameter Result Units Flag RL< 0.0106 Total Selenium mg/L0.02

Method Blank (1) QC Batch: 52201

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RRPrep Batch: 44736QC Preparation: 2008-09-09 Prepared By: KV

MDLParameter Flag Result Units RLTotal Tin < 0.0597 mg/L0.1

Method Blank (1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 152 of 352

QC Batch: 52201

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

Method Blank (1) QC Batch: 52201

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

Method Blank (1) QC Batch: 52201

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

Method Blank (1) QC Batch: 52279

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR
Prep Batch: 44806 QC Preparation: 2008-09-11 Prepared By: KV

Parameter

Total Cadmium

Flag

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 153 of 352

Method Blank (1) QC Batch: 52279 QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RRPrep Batch: 44806QC Preparation: 2008-09-11 Prepared By: KVMDLParameter Result Units RLFlag Total Arsenic < 0.00850mg/L0.01 Method Blank (1) QC Batch: 52279 QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR Prep Batch: 44806QC Preparation: 2008-09-11 Prepared By: KVMDL Parameter Flag Result Units RLTotal Barium < 0.00180 mg/L0.005Method Blank (1) QC Batch: 52279 QC Batch: Date Analyzed: 2008-09-11 Analyzed By: RR 52279 Prep Batch: 44806QC Preparation: 2008-09-11 Prepared By: KVMDLParameter Result RLFlag Units Total Beryllium < 0.00120 mg/L0.002Method Blank (1) QC Batch: 52279 QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR Prep Batch: 44806QC Preparation: 2008-09-11 Prepared By: KVMDL

Result

< 0.00110

Units

mg/L

RL

0.002

Report Date: October 7, 2008 Work Order: 8080828 Page Number: 154 of 352 HELSTF GROUNDWATER

<del>0</del> 5		HELSTF GROUNDWATER		
Method Blank (1)	QC Batch: 52279			
QC Batch: 52279 Prep Batch: 44806		Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11		Analyzed By: RR Prepared By: KV
		$\mathrm{MDL}$		
Parameter	$\operatorname{Flag}$	$\operatorname{Result}$	$\operatorname{Units}$	RL
Total Cobalt		< 0.00170	m mg/L	0.002
Method Blank (1)	QC Batch: 52279			
QC Batch: 52279 Prep Batch: 44806		Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11		Analyzed By: RR Prepared By: KV
Danamatan	Ela∞	MDL Program	IInita	DI
Parameter Total Chromium	Flag	Result < 0.00201	$\frac{ m Units}{ m mg/L}$	$\frac{RL}{0.005}$
Method Blank (1)  QC Batch: 52279 Prep Batch: 44806	QC Batch: 52279	Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11		Analyzed By: RR Prepared By: KV
		$\mathrm{MDL}$		
Parameter	Flag	Result	Units	RL
Total Copper		<0.00129	m mg/L	0.005
Method Blank (1)	QC Batch: 52279			
QC Batch: 52279 Prep Batch: 44806		Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11		Analyzed By: RR Prepared By: KV
Donomoton	Dl	MDL Pagult	T7!	DΙ
Parameter Total Nickel	Flag	Result <0.00271	Units mg/I	$\frac{RL}{0.005}$
Total Mickel		<0.00271	m mg/L	0.005

Work Order: 8080828

Page Number: 155 of 352 HELSTF GROUNDWATER

Method Blank	(1)	QC Batch: 52279
--------------	-----	-----------------

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR Prep Batch: QC Preparation: 2008-09-11 Prepared By: KV44806

MDLParameter Flag Result Units RLTotal Lead < 0.004600.005mg/L

#### Method Blank (1) QC Batch: 52279

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR Prep Batch: 44806 QC Preparation: 2008-09-11 Prepared By: KV

MDLParameter Result Units RLFlag Total Antimony < 0.0150 mg/L 0.02

#### Method Blank (1) QC Batch: 52279

QC Batch: Date Analyzed: 2008-09-11 Analyzed By: RR 52279 Prep Batch: 44806 QC Preparation: 2008-09-11 Prepared By: KV

MDLParameter Result Units Flag RLTotal Selenium < 0.0106 mg/L0.02

#### Method Blank (1) QC Batch: 52279

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RRPrep Batch: 44806QC Preparation: 2008-09-11 Prepared By: KV

MDLParameter Flag Result Units RLTotal Tin < 0.0597 mg/L0.1 Report Date: October 7, 2008 Work Order: 8080828 Page Number: 156 of 352
65 HELSTF GROUNDWATER

65		HELSTF GROUNDWATER			
Method Blank (1)	QC Batch: 52279				
QC Batch: 52279 Prep Batch: 44806		Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11		Analyzed By: Prepared By:	RR KV
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	Units		$_{ m RL}$
Total Thallium		< 0.0223	m mg/L		0.05
Method Blank (1)	QC Batch: 52279				
QC Batch: 52279 Prep Batch: 44806		Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	Units		$\operatorname{RL}$
Total Vanadium		< 0.00132	m mg/L		0.005
Method Blank (1)	QC Batch: 52279				
QC Batch: 52279 Prep Batch: 44806		Date Analyzed:         2008-09-11           QC Preparation:         2008-09-11		Analyzed By: Prepared By:	RR KV
Parameter	$\operatorname{Flag}$	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Zinc		< 0.000679	m mg/L		0.005
Method Blank (1)	QC Batch: 52284				
QC Batch: 52284 Prep Batch: 44821		Date Analyzed:         2008-09-11           QC Preparation:         2008-09-11		Analyzed By: Prepared By:	
Parameter	Flag	$rac{ ext{MDL}}{ ext{Result}}$	$\operatorname{Units}$		$\operatorname{RL}$
Total Mercury		< 0.0000251	${ m mg/L}$		0.0002

Work Order: 8080828 HELSTF GROUNDWATER

Method Blank (1)

QC Batch: 52287

QC Batch: 52287 Prep Batch: 44821

Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: TP

Page Number: 157 of 352

Prepared By: TP

MDL

Parameter	Flag	$\operatorname{Result}$	Units	$\operatorname{RL}$
Total Mercury		< 0.0000251	m mg/L	0.0002

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Prep Batch: 44004

Date Analyzed: 2008-08-11 QC Preparation: 2008-08-11 Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Silver	0.124	mg/L	1	0.125	< 0.000700	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	$_{ m LCSD}$			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	A mount	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.123	mg/L	1	0.125	< 0.000700	98	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Prep Batch: 44004

Date Analyzed: 2008-08-11 QC Preparation: 2008-08-11 Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	${f Limit}$
Total Arsenic	0.509	$\mathrm{mg/L}$	1	0.500	< 0.00850	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	$_{ m LCSD}$			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		$\operatorname{RPD}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.537	$\mathrm{mg/L}$	1	0.500	< 0.00850	107	85 - 115	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 158 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Barium	0.989	$\mathrm{mg/L}$	1	1.00	< 0.00180	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.00	mg/L	1	1.00	< 0.00180	100	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Beryllium	0.0240	$_{ m mg/L}$	1	0.0250	< 0.00120	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0240	mg/L	1	0.0250	< 0.00120	96	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cadmium	0.249	$_{ m mg/L}$	1	0.250	< 0.00110	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.253	mg/L	1	0.250	< 0.00110	101	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 159 of 352

65			

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Cobalt	0.253	m mg/L	1	0.250	< 0.00170	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.256	mg/L	1	0.250	< 0.00170	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Chromium	0.102	$_{ m mg/L}$	1	0.100	< 0.00201	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec}.$	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.103	mg/L	1	0.100	< 0.00201	103	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Copper	0.119	$_{ m mg/L}$	1	0.125	< 0.00129	95	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.120	mg/L	1	0.125	< 0.00129	96	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 160 of 352

	$_{ m LCS}$			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Nickel	0.240	$\mathrm{mg/L}$	1	0.250	< 0.00271	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.242	mg/L	1	0.250	< 0.00271	97	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.454	mg/L	1	0.500	< 0.00460	91	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.485	mg/L	1	0.500	< 0.00460	97	85 - 115	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Antimony	0.252	$_{ m mg/L}$	1	0.250	< 0.0150	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.252	mg/L	1	0.250	< 0.0150	101	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

6	5	

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Selenium	0.442	$\mathrm{mg/L}$	1	0.500	< 0.0106	88	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.442	mg/L	1	0.500	< 0.0106	88	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Prep Batch: 44004 Date Analyzed: 2008-08-11 QC Preparation: 2008-08-11 Analyzed By: RR Prepared By: KV

Page Number: 161 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Tin	0.315	$_{ m mg/L}$	1	0.300	< 0.0597	105	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.318	mg/L	1	0.300	< 0.0597	106	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Prep Batch: 44004 Date Analyzed: 2008-08-11 QC Preparation: 2008-08-11 Analyzed By: RR Prepared By: KV

LCS Spike Matrix Rec. Param Result Units Dil. Amount Result Limit Rec. Total Thallium 0.500 0.500< 0.0223 100 mg/L 85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.526	mg/L	1	0.500	< 0.0223	105	85 - 115	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 162 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Vanadium	0.255	$\mathrm{mg/L}$	1	0.250	< 0.00132	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.257	mg/L	1	0.250	< 0.00132	103	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Zinc	0.239	mg/L	1	0.250	< 0.000679	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.242	mg/L	1	0.250	< 0.000679	97	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Silver	0.123	$_{ m mg/L}$	1	0.125	< 0.000700	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.120	mg/L	1	0.125	< 0.000700	96	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

0	_
b	Ð

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.476	m mg/L	1	0.500	< 0.00850	95	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.504	mg/L	1	0.500	< 0.00850	101	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Prep Batch: 44089 Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14 Analyzed By: RR Prepared By: KV

Page Number: 163 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Barium	1.00	$_{ m mg/L}$	1	1.00	< 0.00180	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	0.966	mg/L	1	1.00	< 0.00180	97	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Prep Batch: 44089 Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14 Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0249	$\mathrm{mg/L}$	1	0.0250	< 0.00120	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0247	mg/L	1	0.0250	< 0.00120	99	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cadmium	0.253	$\mathrm{mg/L}$	1	0.250	< 0.00110	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.246	mg/L	1	0.250	< 0.00110	98	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Prep Batch: 44089 Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14 Analyzed By: RR Prepared By: KV

Page Number: 164 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Cobalt	0.253	$_{ m mg/L}$	1	0.250	< 0.00170	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.246	mg/L	1	0.250	< 0.00170	98	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Prep Batch: 44089 Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14

Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Chromium	0.102	$_{ m mg/L}$	1	0.100	< 0.00201	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0990	mg/L	1	0.100	< 0.00201	99	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

65	

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.124	$\mathrm{mg/L}$	1	0.125	< 0.00129	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.120	mg/L	1	0.125	< 0.00129	96	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Prep Batch: 44089 Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14 Analyzed By: RR Prepared By: KV

Page Number: 165 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Nickel	0.242	$_{ m mg/L}$	1	0.250	< 0.00271	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.235	mg/L	1	0.250	< 0.00271	94	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Prep Batch: 44089 Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14 Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.484	$\mathrm{mg/L}$	1	0.500	< 0.00460	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.486	mg/L	1	0.500	< 0.00460	97	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 166 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Antimony	0.244	m mg/L	1	0.250	< 0.0150	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.250	mg/L	1	0.250	< 0.0150	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Selenium	0.431	mg/L	1	0.500	< 0.0106	86	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.438	mg/L	1	0.500	< 0.0106	88	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Tin	0.314	mg/L	1	0.300	< 0.0597	105	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.315	mg/L	1	0.300	< 0.0597	105	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 167 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Thallium	0.511	$\mathrm{mg/L}$	1	0.500	< 0.0223	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.511	mg/L	1	0.500	< 0.0223	102	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Vanadium	0.257	$_{ m mg/L}$	1	0.250	< 0.00132	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.251	mg/L	1	0.250	< 0.00132	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Zinc	0.241	$_{ m mg/L}$	1	0.250	< 0.000679	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.233	mg/L	1	0.250	< 0.000679	93	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

•	,	t J	
-	-	_	

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Silver	0.123	m mg/L	1	0.125	< 0.000700	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.120	mg/L	1	0.125	< 0.000700	96	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

 QC Batch:
 51429
 Date Analyzed:
 2008-08-14

 Prep Batch:
 44089
 QC Preparation:
 2008-08-14

Date Analyzed: 2008-08-14 Analyzed By: RR QC Preparation: 2008-08-14 Prepared By: KV

Page Number: 168 of 352

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	${f Limit}$
Total Arsenic	0.476	$\mathrm{mg/L}$	1	0.500	< 0.00850	95	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.504	mg/L	1	0.500	< 0.00850	101	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Barium	1.00	$_{ m mg/L}$	1	1.00	< 0.00180	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	0.966	mg/L	1	1.00	< 0.00180	97	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

00			

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Beryllium	0.0249	$\mathrm{mg/L}$	1	0.0250	< 0.00120	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0247	mg/L	1	0.0250	< 0.00120	99	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51429 Prep Batch: 44089 Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14 Analyzed By: RR Prepared By: KV

Page Number: 169 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Cadmium	0.253	$_{ m mg/L}$	1	0.250	< 0.00110	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.246	mg/L	1	0.250	< 0.00110	98	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

 QC Batch:
 51429
 Date Analyzed:
 2008-08-14

 Prep Batch:
 44089
 QC Preparation:
 2008-08-14

Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cobalt	0.253	$\mathrm{mg/L}$	1	0.250	< 0.00170	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.246	mg/L	1	0.250	< 0.00170	98	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 170 of 352

65			

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Chromium	0.102	m mg/L	1	0.100	< 0.00201	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0990	mg/L	1	0.100	< 0.00201	99	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.124	$_{ m mg/L}$	1	0.125	< 0.00129	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.120	mg/L	1	0.125	< 0.00129	96	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	$\overline{ ext{Amount}}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Nickel	0.242	mg/L	1	0.250	< 0.00271	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.235	mg/L	1	0.250	< 0.00271	94	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

65	

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.484	m mg/L	1	0.500	< 0.00460	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.486	mg/L	1	0.500	< 0.00460	97	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51429 Prep Batch: 44089

Date Analyzed: 2008-08-14 QC Preparation: 2008-08-14 Analyzed By: RR Prepared By: KV

Page Number: 171 of 352

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Antimony	0.244	$_{ m mg/L}$	1	0.250	< 0.0150	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.250	mg/L	1	0.250	< 0.0150	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

 QC Batch:
 51429
 Date Analyzed:
 2008-08-14

 Prep Batch:
 44089
 QC Preparation:
 2008-08-14

Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Selenium	0.431	${ m mg/L}$	1	0.500	< 0.0106	86	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.438	mg/L	1	0.500	< 0.0106	88	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 172 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	Units	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Tin	0.314	$\mathrm{mg/L}$	1	0.300	< 0.0597	105	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.315	mg/L	1	0.300	< 0.0597	105	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Thallium	0.511	mg/L	1	0.500	< 0.0223	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.511	mg/L	1	0.500	< 0.0223	102	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Vanadium	0.257	$_{ m mg/L}$	1	0.250	< 0.00132	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.251	mg/L	1	0.250	< 0.00132	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Zinc	0.241	$\mathrm{mg/L}$	1	0.250	< 0.000679	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.233	mg/L	1	0.250	< 0.000679	93	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51475 Prep Batch: 44137 Date Analyzed: 2008-08-15 QC Preparation: 2008-08-15 Analyzed By: TP Prepared By: TP

Page Number: 173 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Mercury	0.000987	$_{ m mg/L}$	1	0.00100	< 0.0000251	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	Amount	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.00101	mg/L	1	0.00100	< 0.0000251	101	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51617 Prep Batch: 44217 Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19

Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Silver	0.126	$\mathrm{mg/L}$	1	0.125	< 0.000700	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.126	mg/L	1	0.125	< 0.000700	101	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 174 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.535	$\mathrm{mg/L}$	1	0.500	< 0.00850	107	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.532	mg/L	1	0.500	< 0.00850	106	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Barium	1.03	$_{ m mg/L}$	1	1.00	< 0.00180	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.03	mg/L	1	1.00	< 0.00180	103	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0250	mg/L	1	0.0250	< 0.00120	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0245	mg/L	1	0.0250	< 0.00120	98	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 175 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cadmium	0.265	$\mathrm{mg/L}$	1	0.250	< 0.00110	106	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.265	mg/L	1	0.250	< 0.00110	106	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Cobalt	0.266	mg/L	1	0.250	< 0.00170	106	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.265	mg/L	1	0.250	< 0.00170	106	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Chromium	0.107	$_{ m mg/L}$	1	0.100	< 0.00201	107	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.107	mg/L	1	0.100	< 0.00201	107	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

a =		
22		
65		

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.132	${ m mg/L}$	1	0.125	< 0.00129	106	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.124	mg/L	1	0.125	< 0.00129	99	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51617 Prep Batch: 44217 Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19 Analyzed By: RR Prepared By: KV

Page Number: 176 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Nickel	0.261	$_{ m mg/L}$	1	0.250	< 0.00271	104	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.258	mg/L	1	0.250	< 0.00271	103	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

 QC Batch:
 51617
 Date Analyzed:
 2008-08-20

 Prep Batch:
 44217
 QC Preparation:
 2008-08-19

Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.495	$\mathrm{mg/L}$	1	0.500	< 0.00460	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.491	mg/L	1	0.500	< 0.00460	98	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 177 of 352

c	_
O	Э

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Antimony	0.256	m mg/L	1	0.250	< 0.0150	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.266	mg/L	1	0.250	< 0.0150	106	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Selenium	0.438	$_{ m mg/L}$	1	0.500	< 0.0106	88	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.451	mg/L	1	0.500	< 0.0106	90	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Tin	0.328	$_{ m mg/L}$	1	0.300	< 0.0597	109	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.323	mg/L	1	0.300	< 0.0597	108	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

0	_
b	a
_	~

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Thallium	0.545	$\mathrm{mg/L}$	1	0.500	< 0.0223	109	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.545	mg/L	1	0.500	< 0.0223	109	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51617 Prep Batch: 44217 Date Analyzed: 2008-08-20 QC Preparation: 2008-08-19

Analyzed By: RR Prepared By: KV

Page Number: 178 of 352

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Vanadium	0.264	$_{ m mg/L}$	1	0.250	< 0.00132	106	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.262	mg/L	1	0.250	< 0.00132	105	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

 QC Batch:
 51617
 Date Analyzed:
 2008-08-20

 Prep Batch:
 44217
 QC Preparation:
 2008-08-19

Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Zinc	0.251	${ m mg/L}$	1	0.250	< 0.000679	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.249	mg/L	1	0.250	< 0.000679	100	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 179 of 352

65
----

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Silver	0.124	$\mathrm{mg/L}$	1	0.125	< 0.000700	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.127	mg/L	1	0.125	< 0.000700	102	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Arsenic	0.513	$_{ m mg/L}$	1	0.500	< 0.00850	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.543	mg/L	1	0.500	< 0.00850	109	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Barium	1.02	$_{ m mg/L}$	1	1.00	< 0.00180	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.05	mg/L	1	1.00	< 0.00180	105	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 180 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0234	$\mathrm{mg/L}$	1	0.0250	< 0.00120	94	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0260	mg/L	1	0.0250	< 0.00120	104	85 - 115	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cadmium	0.270	mg/L	1	0.250	< 0.00110	108	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.276	mg/L	1	0.250	< 0.00110	110	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cobalt	0.262	mg/L	1	0.250	< 0.00170	105	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.270	mg/L	1	0.250	< 0.00170	108	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 181 of 352

65	
60	

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Chromium	0.108	$\mathrm{mg/L}$	1	0.100	< 0.00201	108	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.111	mg/L	1	0.100	< 0.00201	111	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Copper	0.125	$_{ m mg/L}$	1	0.125	< 0.00129	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.135	mg/L	1	0.125	< 0.00129	108	85 - 115	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	$\overline{\mathrm{Amount}}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Nickel	0.250	$_{ m mg/L}$	1	0.250	< 0.00271	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.257	mg/L	1	0.250	< 0.00271	103	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 182 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.517	$\mathrm{mg/L}$	1	0.500	< 0.00460	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.525	$_{ m mg/L}$	1	0.500	< 0.00460	105	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

LCS Spike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. 0.270 < 0.0150 Total Antimony mg/L0.250 108 85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.272	mg/L	1	0.250	< 0.0150	109	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Selenium	0.450	$_{ m mg/L}$	1	0.500	< 0.0106	90	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.478	mg/L	1	0.500	< 0.0106	96	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 183 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Tin	0.326	$\mathrm{mg/L}$	1	0.300	< 0.0597	109	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	$_{ m LCSD}$			$_{ m Spike}$	Matrix		Rec.		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.338	mg/L	1	0.300	< 0.0597	113	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Thallium	0.557	$_{ m mg/L}$	1	0.500	< 0.0223	111	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.571	mg/L	1	0.500	< 0.0223	114	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Vanadium	0.268	mg/L	1	0.250	< 0.00132	107	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.276	mg/L	1	0.250	< 0.00132	110	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 184 of 352

65

	$_{ m LCS}$			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Zinc	0.252	$\mathrm{mg/L}$	1	0.250	< 0.000679	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.269	mg/L	1	0.250	< 0.000679	108	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51771 Date Analyzed: 2008-08-25 Analyzed By: TP
Prep Batch: 44397 QC Preparation: 2008-08-25 Prepared By: TP

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$
Total Mercury	0.000995	mg/L	1	0.00100	< 0.0000251	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.000954	mg/L	1	0.00100	< 0.0000251	95	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51772 Date Analyzed: 2008-08-25 Analyzed By: TP
Prep Batch: 44397 QC Preparation: 2008-08-25 Prepared By: TP

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Mercury	0.000995	$_{ m mg/L}$	1	0.00100	< 0.0000251	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	$_{ m LCSD}$			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	A mount	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.000954	mg/L	1	0.00100	< 0.0000251	95	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 185 of 352

(	j,	5	)

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Silver	0.123	m mg/L	1	0.125	< 0.000700	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.122	mg/L	1	0.125	< 0.000700	98	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.487	$_{ m mg/L}$	1	0.500	< 0.00850	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.479	mg/L	1	0.500	< 0.00850	96	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	$_{ m LCS}$			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	$\overline{\mathrm{Amount}}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Barium	1.02	$_{ m mg/L}$	1	1.00	< 0.00180	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.01	mg/L	1	1.00	< 0.00180	101	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 186 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0240	$\mathrm{mg/L}$	1	0.0250	< 0.00120	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0245	mg/L	1	0.0250	< 0.00120	98	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Cadmium	0.262	mg/L	1	0.250	< 0.00110	105	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.262	mg/L	1	0.250	< 0.00110	105	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Cobalt	0.263	mg/L	1	0.250	< 0.00170	105	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.262	mg/L	1	0.250	< 0.00170	105	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

60	

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Chromium	0.104	$\mathrm{mg/L}$	1	0.100	< 0.00201	104	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.105	mg/L	1	0.100	< 0.00201	105	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51793 Prep Batch: 44405 Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26 Analyzed By: RR Prepared By: KV

Page Number: 187 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Copper	0.121	$_{ m mg/L}$	1	0.125	< 0.00129	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.123	mg/L	1	0.125	< 0.00129	98	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51793 I Prep Batch: 44405

Date Analyzed: 2008-08-26 QC Preparation: 2008-08-26 Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Nickel	0.256	${ m mg/L}$	1	0.250	< 0.00271	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.256	mg/L	1	0.250	< 0.00271	102	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 188 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.491	m mg/L	1	0.500	< 0.00460	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.491	mg/L	1	0.500	< 0.00460	98	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Antimony	0.271	$_{ m mg/L}$	1	0.250	< 0.0150	108	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.276	mg/L	1	0.250	< 0.0150	110	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Selenium	0.451	$_{ m mg/L}$	1	0.500	< 0.0106	90	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.436	mg/L	1	0.500	< 0.0106	87	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 189 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Tin	0.327	m mg/L	1	0.300	< 0.0597	109	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	Units	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.326	mg/L	1	0.300	< 0.0597	109	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Thallium	0.551	mg/L	1	0.500	< 0.0223	110	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.553	mg/L	1	0.500	< 0.0223	111	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Vanadium	0.254	mg/L	1	0.250	< 0.00132	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.253	mg/L	1	0.250	< 0.00132	101	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 190 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Zinc	0.254	m mg/L	1	0.250	< 0.000679	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.257	mg/L	1	0.250	< 0.000679	103	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Silver	0.118	$_{ m mg/L}$	1	0.125	< 0.000700	94	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.119	mg/L	1	0.125	< 0.000700	95	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.457	$_{ m mg/L}$	1	0.500	< 0.00850	91	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.469	mg/L	1	0.500	< 0.00850	94	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 191 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Barium	0.996	$\mathrm{mg/L}$	1	1.00	< 0.00180	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	0.981	mg/L	1	1.00	< 0.00180	98	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Beryllium	0.0220	mg/L	1	0.0250	< 0.00120	88	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0220	mg/L	1	0.0250	< 0.00120	88	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cadmium	0.240	mg/L	1	0.250	< 0.00110	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.248	mg/L	1	0.250	< 0.00110	99	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

6	5

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cobalt	0.242	m mg/L	1	0.250	< 0.00170	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.245	mg/L	1	0.250	< 0.00170	98	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51924 Prep Batch: 44510 Date Analyzed: 2008-08-29 QC Preparation: 2008-08-29 Analyzed By: RR Prepared By: KV

Page Number: 192 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Chromium	0.0970	mg/L	1	0.100	< 0.00201	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0990	mg/L	1	0.100	< 0.00201	99	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51924 Prep Batch: 44510 Date Analyzed: 2008-08-29 QC Preparation: 2008-08-29

Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.125	$\mathrm{mg/L}$	1	0.125	< 0.00129	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.121	mg/L	1	0.125	< 0.00129	97	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 193 of 352

Rec. Limit 85 - 115

	$_{ m LCS}$			Spike	Matrix	
Param	Result	Units	Dil.	$\overline{\mathrm{Amount}}$	$\operatorname{Result}$	$\operatorname{Rec}$
Total Nickel	0.239	$\mathrm{mg/L}$	1	0.250	< 0.00271	96

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.235	mg/L	1	0.250	< 0.00271	94	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$	$\operatorname{Limit}$
Total Lead	0.480	mg/L	1	0.500	< 0.00460	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.477	mg/L	1	0.500	< 0.00460	95	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Antimony	0.260	$_{ m mg/L}$	1	0.250	< 0.0150	104	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.255	mg/L	1	0.250	< 0.0150	102	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 194 of 352

65

	LCS			Spike	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Selenium	0.441	$\mathrm{mg/L}$	1	0.500	< 0.0106	88	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.442	mg/L	1	0.500	< 0.0106	88	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	$_{ m LCS}$			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Tin	0.292	mg/L	1	0.300	< 0.0597	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.307	mg/L	1	0.300	< 0.0597	102	85 - 115	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Thallium	0.492	$_{ m mg/L}$	1	0.500	< 0.0223	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.507	mg/L	1	0.500	< 0.0223	101	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Vanadium	0.248	$\mathrm{mg/L}$	1	0.250	< 0.00132	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.251	mg/L	1	0.250	< 0.00132	100	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

 QC Batch:
 51924
 Da

 Prep Batch:
 44510
 QC

Date Analyzed: 2008-08-29 QC Preparation: 2008-08-29 Analyzed By: RR Prepared By: KV

Page Number: 195 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Zinc	0.239	$\mathrm{mg/L}$	1	0.250	< 0.000679	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.245	mg/L	1	0.250	< 0.000679	98	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

 QC Batch:
 52016
 Date Analyzed:
 2008-09-03

 Prep Batch:
 44581
 QC Preparation:
 2008-09-03

Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Silver	0.123	$\mathrm{mg/L}$	1	0.125	< 0.000700	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.121	mg/L	1	0.125	< 0.000700	97	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 196 of 352

65

	$_{ m LCS}$			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.512	$\mathrm{mg/L}$	1	0.500	< 0.00850	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.506	mg/L	1	0.500	< 0.00850	101	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Barium	1.06	mg/L	1	1.00	< 0.00180	106	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.06	mg/L	1	1.00	< 0.00180	106	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Beryllium	0.0250	$_{ m mg/L}$	1	0.0250	< 0.00120	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0257	mg/L	1	0.0250	< 0.00120	103	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 197 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cadmium	0.252	$\mathrm{mg/L}$	1	0.250	< 0.00110	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.249	$\mathrm{mg/L}$	1	0.250	< 0.00110	100	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

LCS Spike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Cobalt 0.250 < 0.00170102 0.254 mg/L85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.252	mg/L	1	0.250	< 0.00170	101	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Chromium	0.0960	$_{ m mg/L}$	1	0.100	< 0.00201	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0950	mg/L	1	0.100	< 0.00201	95	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.123	m mg/L	1	0.125	< 0.00129	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		Rec.		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.122	mg/L	1	0.125	< 0.00129	98	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52016 Prep Batch: 44581

Date Analyzed: 2008-09-03 QC Preparation: 2008-09-03

Analyzed By: RR Prepared By: KV

Page Number: 198 of 352

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Nickel	0.258	mg/L	1	0.250	< 0.00271	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.256	mg/L	1	0.250	< 0.00271	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52016 Prep Batch: 44581

Date Analyzed: 2008-09-03 QC Preparation: 2008-09-03 Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.526	${ m mg/L}$	1	0.500	< 0.00460	105	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.528	mg/L	1	0.500	< 0.00460	106	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 199 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Antimony	0.247	$\mathrm{mg/L}$	1	0.250	< 0.0150	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.238	mg/L	1	0.250	< 0.0150	95	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$	$\operatorname{Limit}$
Total Selenium	0.478	mg/L	1	0.500	< 0.0106	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.477	mg/L	1	0.500	< 0.0106	95	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	$_{ m LCS}$			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Tin	0.303	$\mathrm{mg/L}$	1	0.300	< 0.0597	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.306	mg/L	1	0.300	< 0.0597	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 200 of 352

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Thallium	0.503	m mg/L	1	0.500	< 0.0223	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.502	mg/L	1	0.500	< 0.0223	100	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Vanadium	0.254	$_{ m mg/L}$	1	0.250	< 0.00132	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.254	mg/L	1	0.250	< 0.00132	102	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Zinc	0.233	$\mathrm{mg/L}$	1	0.250	< 0.000679	93	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.232	mg/L	1	0.250	< 0.000679	93	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 201 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Mercury	0.00100	$\mathrm{mg/L}$	1	0.00100	< 0.0000251	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.00106	mg/L	1	0.00100	< 0.0000251	106	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52085 Date Analyzed: 2008-09-04 Analyzed By: TP
Prep Batch: 44653 QC Preparation: 2008-09-04 Prepared By: TP

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$
Total Mercury	0.00100	$_{ m mg/L}$	1	0.00100	< 0.0000251	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.00106	mg/L	1	0.00100	< 0.0000251	106	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Silver	0.119	$\mathrm{mg/L}$	1	0.125	< 0.000700	95	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	$_{ m LCSD}$			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.119	mg/L	1	0.125	< 0.000700	95	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

# Work Order: 8080828 HELSTF GROUNDWATER

Page Number: 202 of 352

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.488	mg/L	1	0.500	< 0.00850	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.481	mg/L	1	0.500	< 0.00850	96	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Barium	1.07	$_{ m mg/L}$	1	1.00	< 0.00180	107	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.05	mg/L	1	1.00	< 0.00180	105	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0240	mg/L	1	0.0250	< 0.00120	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0244	mg/L	1	0.0250	< 0.00120	98	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 203 of 352

r	_
h	n
	•

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cadmium	0.242	m mg/L	1	0.250	< 0.00110	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.239	$\mathrm{mg/L}$	1	0.250	< 0.00110	96	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Cobalt	0.247	$_{ m mg/L}$	1	0.250	< 0.00170	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.244	mg/L	1	0.250	< 0.00170	98	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Chromium	0.0990	$_{ m mg/L}$	1	0.100	< 0.00201	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0970	mg/L	1	0.100	< 0.00201	97	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 204 of 352

00

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.124	m mg/L	1	0.125	< 0.00129	99	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.119	mg/L	1	0.125	< 0.00129	95	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Nickel	0.251	mg/L	1	0.250	< 0.00271	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.244	mg/L	1	0.250	< 0.00271	98	85 - 115	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Lead	0.511	mg/L	1	0.500	< 0.00460	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.502	mg/L	1	0.500	< 0.00460	100	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 205 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Antimony	0.243	$\mathrm{mg/L}$	1	0.250	< 0.0150	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.242	mg/L	1	0.250	< 0.0150	97	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

LCS Spike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Selenium < 0.0106 87 85 - 115 0.437mg/L0.500

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.438	mg/L	1	0.500	< 0.0106	88	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	Result	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Tin	0.291	$_{ m mg/L}$	1	0.300	< 0.0597	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec.}$	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.287	mg/L	1	0.300	< 0.0597	96	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 206 of 352

6	5

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Thallium	0.486	m mg/L	1	0.500	< 0.0223	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.487	mg/L	1	0.500	< 0.0223	97	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Vanadium	0.245	$_{ m mg/L}$	1	0.250	< 0.00132	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.242	mg/L	1	0.250	< 0.00132	97	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR
Prep Batch: 44662 QC Preparation: 2008-09-05 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Zinc	0.256	$\mathrm{mg/L}$	1	0.250	< 0.000679	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.227	mg/L	1	0.250	< 0.000679	91	85 - 115	12	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 207 of 352

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Silver	0.121	m mg/L	1	0.125	< 0.000700	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.121	mg/L	1	0.125	< 0.000700	97	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Arsenic	0.514	$_{ m mg/L}$	1	0.500	< 0.00850	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.509	mg/L	1	0.500	< 0.00850	102	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	Units	Dil.	$\overline{ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Barium	1.09	$_{ m mg/L}$	1	1.00	< 0.00180	109	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.08	mg/L	1	1.00	< 0.00180	108	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 208 of 352

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0260	$\mathrm{mg/L}$	1	0.0250	< 0.00120	104	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0250	mg/L	1	0.0250	< 0.00120	100	85 - 115	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Cadmium	0.258	$_{ m mg/L}$	1	0.250	< 0.00110	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.259	mg/L	1	0.250	< 0.00110	104	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Cobalt	0.253	$_{ m mg/L}$	1	0.250	< 0.00170	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.254	mg/L	1	0.250	< 0.00170	102	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

|--|

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Chromium	0.0970	$\mathrm{mg/L}$	1	0.100	< 0.00201	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0950	mg/L	1	0.100	< 0.00201	95	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

Page Number: 209 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Copper	0.123	$_{ m mg/L}$	1	0.125	< 0.00129	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.121	mg/L	1	0.125	< 0.00129	97	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

 QC Batch:
 52201
 Date Analyzed:
 2008-09-09

 Prep Batch:
 44736
 QC Preparation:
 2008-09-09

Analyzed By: RR Prepared By: KV

LCS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Nickel 0.2590.250< 0.00271 104 mg/L85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.257	mg/L	1	0.250	< 0.00271	103	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 210 of 352

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.499	m mg/L	1	0.500	< 0.00460	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.506	$\mathrm{mg/L}$	1	0.500	< 0.00460	101	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Antimony	0.256	$_{ m mg/L}$	1	0.250	< 0.0150	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.253	mg/L	1	0.250	< 0.0150	101	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Selenium	0.468	$_{ m mg/L}$	1	0.500	< 0.0106	94	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.465	mg/L	1	0.500	< 0.0106	93	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 211 of 352

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Tin	0.321	$\mathrm{mg/L}$	1	0.300	< 0.0597	107	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.319	mg/L	1	0.300	< 0.0597	106	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Thallium	0.517	mg/L	1	0.500	< 0.0223	103	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.517	mg/L	1	0.500	< 0.0223	103	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR
Prep Batch: 44736 QC Preparation: 2008-09-09 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Vanadium	0.254	mg/L	1	0.250	< 0.00132	102	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.253	mg/L	1	0.250	< 0.00132	101	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

(	j,	5	)

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Zinc	0.237	$\mathrm{mg/L}$	1	0.250	< 0.000679	95	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.239	mg/L	1	0.250	< 0.000679	96	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

Page Number: 212 of 352

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Silver	0.120	$\mathrm{mg/L}$	1	0.125	< 0.000700	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.121	mg/L	1	0.125	< 0.000700	97	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

 QC Batch:
 52279
 Date Analyzed:
 2008-09-11

 Prep Batch:
 44806
 QC Preparation:
 2008-09-11

Analyzed By: RR Prepared By: KV

LCS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Arsenic 0.4710.500< 0.00850 mg/L94 85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.477	mg/L	1	0.500	< 0.00850	95	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 213 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Barium	1.07	$\mathrm{mg/L}$	1	1.00	< 0.00180	107	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.07	mg/L	1	1.00	< 0.00180	107	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR
Prep Batch: 44806 QC Preparation: 2008-09-11 Prepared By: KV

LCS Spike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Beryllium 0.0250 < 0.00120 85 - 115 0.0235mg/L94

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0250	mg/L	1	0.0250	< 0.00120	100	85 - 115	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR
Prep Batch: 44806 QC Preparation: 2008-09-11 Prepared By: KV

LCS Spike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Cadmium 0.249 0.250< 0.00110 100 mg/L85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.250	mg/L	1	0.250	< 0.00110	100	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 214 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Cobalt	0.245	$\mathrm{mg/L}$	1	0.250	< 0.00170	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.244	mg/L	1	0.250	< 0.00170	98	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR
Prep Batch: 44806 QC Preparation: 2008-09-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Chromium	0.0970	mg/L	1	0.100	< 0.00201	97	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0970	mg/L	1	0.100	< 0.00201	97	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR
Prep Batch: 44806 QC Preparation: 2008-09-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.120	mg/L	1	0.125	< 0.00129	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.121	mg/L	1	0.125	< 0.00129	97	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Nickel	0.246	$\mathrm{mg/L}$	1	0.250	< 0.00271	98	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.247	mg/L	1	0.250	< 0.00271	99	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

Page Number: 215 of 352

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Lead	0.522	$_{ m mg/L}$	1	0.500	< 0.00460	104	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.519	mg/L	1	0.500	< 0.00460	104	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11

Analyzed By: RR Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Antimony	0.241	$_{ m mg/L}$	1	0.250	< 0.0150	96	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.243	mg/L	1	0.250	< 0.0150	97	85 - 115	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 216 of 352

00

	LCS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Selenium	0.439	$\mathrm{mg/L}$	1	0.500	< 0.0106	88	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.431	mg/L	1	0.500	< 0.0106	86	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

# Laboratory Control Spike (LCS-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR
Prep Batch: 44806 QC Preparation: 2008-09-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Tin	0.304	$_{ m mg/L}$	1	0.300	< 0.0597	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.303	mg/L	1	0.300	< 0.0597	101	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR
Prep Batch: 44806 QC Preparation: 2008-09-11 Prepared By: KV

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Thallium	0.503	$_{ m mg/L}$	1	0.500	< 0.0223	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.501	mg/L	1	0.500	< 0.0223	100	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 217 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Vanadium	0.251	mg/L	1	0.250	< 0.00132	100	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$_{ m Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.252	mg/L	1	0.250	< 0.00132	101	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR
Prep Batch: 44806 QC Preparation: 2008-09-11 Prepared By: KV

LCS Spike Rec. Matrix Limit Param Result Units Dil. Amount Result Rec. Total Zinc 0.2370.250 mg/L< 0.000679 95 85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.238	mg/L	1	0.250	< 0.000679	95	85 - 115	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 52284 Date Analyzed: 2008-09-11 Analyzed By: TP
Prep Batch: 44821 QC Preparation: 2008-09-11 Prepared By: TP

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$
Total Mercury	0.00101	$_{ m mg/L}$	1	0.00100	< 0.0000251	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	A mount	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.00103	mg/L	1	0.00100	< 0.0000251	103	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 52287 Date Analyzed: 2008-09-11 Analyzed By: TP
Prep Batch: 44821 QC Preparation: 2008-09-11 Prepared By: TP

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 218 of 352

65

	LCS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$
Total Mercury	0.00101	mg/L	1	0.00100	< 0.0000251	101	85 - 115

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	LCSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.00103	mg/L	1	0.00100	< 0.0000251	103	85 - 115	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

MSSpike Rec. Matrix Limit Param Units Dil. Amount Result Result Rec. Total Silver 0.124mg/L0.125 < 0.000700 99 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.120	mg/L	1	0.125	< 0.000700	96	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Arsenic 0.541 0.500 < 0.00850 108 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Rec. Param Result Units Dil. Amount Result Limit RPD Limit 0.518 0.500 75 - 125 20 Total Arsenic mg/L< 0.00850 104

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 219 of 352

r	_
h	n
	•

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Barium	1.04	$\mathrm{mg/L}$	1	1.00	0.055	98	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.00	mg/L	1	1.00	0.055	94	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Bervllium	0.0230	mg/L	1	0.0250	< 0.00120	92	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0240	mg/L	1	0.0250	< 0.00120	96	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$
Total Cadmium	0.251	$_{ m mg/L}$	1	0.250	< 0.00110	100	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.242	mg/L	1	0.250	< 0.00110	97	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 220 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cobalt	0.245	m mg/L	1	0.250	< 0.00170	98	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.235	mg/L	1	0.250	< 0.00170	94	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

MSSpike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Chromium < 0.00201 0.101 mg/L0.100 101 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0980	mg/L	1	0.100	< 0.00201	98	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 0.120 0.125< 0.00129 96 Total Copper mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.118	mg/L	1	0.125	< 0.00129	94	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 221 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Nickel	0.232	m mg/L	1	0.250	< 0.00271	93	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec}.$	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.227	mg/L	1	0.250	< 0.00271	91	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

MSSpike Rec. Matrix Limit Param Result Units Dil. Amount Result Rec. Total Lead 0.500 < 0.00460 0.439 mg/L88 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.438	mg/L	1	0.500	< 0.00460	88	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Limit Rec. 0.249 0.250< 0.0150100 Total Antimony mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPD Limit 0.25075 - 125 20 Total Antimony 0.248 mg/L < 0.0150 99

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 222 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Selenium	0.460	m mg/L	1	0.500	< 0.0106	92	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.462	mg/L	1	0.500	< 0.0106	92	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

MSRec. Spike Matrix Limit Param Result Units Dil. Result Amount Rec. Total Tin 0.311 mg/L0.300 < 0.0597104 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.291	mg/L	1	0.300	< 0.0597	97	75 - 125	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR
Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Limit Rec. Total Thallium 0.501 < 0.0223 100 mg/L0.50075 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.495	mg/L	1	0.500	< 0.0223	99	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 223 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Vanadium	0.252	$\mathrm{mg/L}$	1	0.250	< 0.00132	101	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.253	mg/L	1	0.250	< 0.00132	101	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169742

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR Prep Batch: 44004 QC Preparation: 2008-08-11 Prepared By: KV

MSSpike Rec. Matrix Limit Param Units Dil. Amount Result Result Rec. Total Zinc 0.241 mg/L0.250< 0.000679 96 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.234	mg/L	1	0.250	< 0.000679	94	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Silver 0.110 0.125< 0.000700 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPD Limit Total Silver 0.120 mg/L0.125 < 0.000700 75 - 125 20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 224 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Arsenic	0.464	$_{ m mg/L}$	1	0.500	< 0.00850	93	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.487	mg/L	1	0.500	< 0.00850	97	75 - 125	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Rec. Matrix Limit Param Dil. Amount Result Result Units Rec. 1.00Total Barium 0.906 mg/L0.06584 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	0.998	mg/L	1	1.00	0.065	93	75 - 125	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 0.0251Total Beryllium 0.0250< 0.00120 100 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Limit RPD Limit Rec. 20 Total Beryllium 0.0243 mg/L0.0250 < 0.00120 97 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 225 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cadmium	0.216	m mg/L	1	0.250	< 0.00110	86	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.235	mg/L	1	0.250	< 0.00110	94	75 - 125	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Rec. Matrix Result Limit Param Units Dil. Amount Result Rec. Total Cobalt 0.250 < 0.00170 0.210 mg/L84 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.230	mg/L	1	0.250	< 0.00170	92	75 - 125	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Chromium 0.0870 0.100 < 0.00201 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Limit RPD Limit Rec. 20 Total Chromium 0.0950 mg/L0.100 < 0.00201 95 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 226 of 352

65

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.110	m mg/L	1	0.125	< 0.00129	88	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.123	mg/L	1	0.125	< 0.00129	98	75 - 125	11	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Nickel 0.250 < 0.002710.201 mg/L80 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.221	mg/L	1	0.250	< 0.00271	88	75 - 125	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Lead 0.5220.500 < 0.00460 104 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.438	mg/L	1	0.500	< 0.00460	88	75 - 125	18	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 227 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Antimony	0.222	m mg/L	1	0.250	< 0.0150	89	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.235	mg/L	1	0.250	< 0.0150	94	75 - 125	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSRec. Spike Matrix Limit Param Result Units Dil. Result Amount Rec. Total Selenium 89 75 - 125 0.445mg/L0.500< 0.0106

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.477	mg/L	1	0.500	< 0.0106	95	75 - 125	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Limit Rec. Total Tin 0.274< 0.0597mg/L0.30075 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.297	mg/L	1	0.300	< 0.0597	99	75 - 125	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 228 of 352

65

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Thallium	0.431	m mg/L	1	0.500	< 0.0223	86	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.468	$_{ m mg/L}$	1	0.500	< 0.0223	94	75 - 125	8	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Rec. Matrix Limit Param Result Units Dil. Amount Result Rec. Total Vanadium 0.239 0.250 < 0.00132 mg/L96 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.253	mg/L	1	0.250	< 0.00132	101	75 - 125	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 169743

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Zinc 0.230 0.250< 0.000679 mg/L92 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPD Limit Total Zinc 0.2520.25075 - 125 mg/L< 0.000679 101 20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 229 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Silver	0.113	m mg/L	1	0.125	< 0.000700	90	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${\bf Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.116	$\mathrm{mg/L}$	1	0.125	< 0.000700	93	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Rec. Matrix Limit Param Result Units Dil. Amount Result Rec. 0.500 < 0.00850 Total Arsenic 0.475mg/L95 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.461	mg/L	1	0.500	< 0.00850	92	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Barium 0.822 1.00 0.008 mg/L 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPDLimit 20 Total Barium 0.849 mg/L 1.00 0.008 84 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 230 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0190	m mg/L	1	0.0250	< 0.00120	76	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0210	mg/L	1	0.0250	< 0.00120	84	75 - 125	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Rec. Matrix Limit Param Result Units Dil. Amount Result Rec. Total Cadmium 0.250 < 0.00110 0.200 mg/L80 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.204	mg/L	1	0.250	< 0.00110	82	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Cobalt 0.201 0.250< 0.00170 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPD Limit 0.202 0.25020 Total Cobalt mg/L< 0.0017075 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 231 of 352

65

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Chromium	0.0880	$\mathrm{mg/L}$	1	0.100	0.005	83	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0900	$_{ m mg/L}$	1	0.100	0.005	85	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Rec. Matrix Result Limit Param Units Dil. Amount Result Rec. < 0.00129 Total Copper 0.112 mg/L0.125 90 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.113	mg/L	1	0.125	< 0.00129	90	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Nickel 0.1960.250< 0.00271 mg/L78 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPD Limit 0.211 0.25020 Total Nickel mg/L< 0.0027175 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 232 of 352

65

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.509	m mg/L	1	0.500	< 0.00460	102	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.515	mg/L	1	0.500	< 0.00460	103	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSRec. Spike Matrix Limit Param Units Dil. Result Result Amount Rec. 0.226 Total Antimony mg/L0.250< 0.015090 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.229	mg/L	1	0.250	< 0.0150	92	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 0.4530.5000.058Total Selenium mg/L 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPDLimit 0.47320 Total Selenium mg/L 0.500 0.05883 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 233 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Tin	0.260	m mg/L	1	0.300	< 0.0597	87	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.270	mg/L	1	0.300	< 0.0597	90	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSRec. Spike Matrix Limit Param Units Dil. Result Result Amount Rec. Total Thallium 82 0.408 mg/L0.500< 0.022375 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.403	mg/L	1	0.500	< 0.0223	81	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR
Prep Batch: 44089 QC Preparation: 2008-08-14 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Vanadium 0.2470.2500.026mg/L 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.253	mg/L	1	0.250	0.026	91	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170455

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 234 of 352

65

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Zinc	0.212	mg/L	1	0.250	0.006	82	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.217	mg/L	1	0.250	0.006	84	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170168

QC Batch: 51475 Date Analyzed: 2008-08-15 Analyzed By: TP Prep Batch: 44137 QC Preparation: 2008-08-15 Prepared By: TP

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Mercury	0.000956	$_{ m mg/L}$	1	0.00100	< 0.0000251	96	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.000961	mg/L	1	0.00100	< 0.0000251	96	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Silver	0.122	$_{ m mg/L}$	1	0.125	< 0.000700	98	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\mathbf{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.119	mg/L	1	0.125	< 0.000700	95	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 235 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.482	m mg/L	1	0.500	< 0.00850	96	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.492	mg/L	1	0.500	< 0.00850	98	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

MSSpike Rec. Matrix Limit Param Dil. Amount Result Result Units Rec. 1.00Total Barium 0.945mg/L0.01 94 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	0.927	$_{ m mg/L}$	1	1.00	0.01	92	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 92 Total Beryllium 0.02300.0250< 0.00120 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPD Limit 20 Total Beryllium 0.0233 mg/L0.0250 < 0.00120 93 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 236 of 352

65

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cadmium	0.222	$\mathrm{mg/L}$	1	0.250	< 0.00110	89	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.216	mg/L	1	0.250	< 0.00110	86	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

MSSpike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Cobalt 0.219 0.250 < 0.00170 mg/L88 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.215	mg/L	1	0.250	< 0.00170	86	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Limit Rec. Total Chromium 0.09600.100 0.004 92 mg/L 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0930	mg/L	1	0.100	0.004	89	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 237 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.119	m mg/L	1	0.125	< 0.00129	95	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.116	$\mathrm{mg/L}$	1	0.125	< 0.00129	93	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

MSSpike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Nickel 0.250 < 0.0027175 - 125 0.212 mg/L85

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.210	mg/L	1	0.250	< 0.00271	84	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Lead 0.4230.500 < 0.00460 mg/L85 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.447	mg/L	1	0.500	< 0.00460	89	75 - 125	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 238 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$	$\operatorname{Limit}$
Total Antimony	0.252	m mg/L	1	0.250	< 0.0150	101	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.238	mg/L	1	0.250	< 0.0150	95	75 - 125	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

MSSpike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Selenium 75 - 125 0.450mg/L0.500 0.031 84

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.459	mg/L	1	0.500	0.031	86	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 0.278Total Tin < 0.059793 mg/L0.30075 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.271	mg/L	1	0.300	< 0.0597	90	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 239 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Thallium	0.445	m mg/L	1	0.500	< 0.0223	89	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.446	$_{ m mg/L}$	1	0.500	< 0.0223	89	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

MSSpike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Vanadium 0.259 0.250 75 - 125 mg/L0.018 96

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.252	mg/L	1	0.250	0.018	94	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR
Prep Batch: 44217 QC Preparation: 2008-08-19 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Zinc 0.229 0.250< 0.000679 92 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.224	mg/L	1	0.250	< 0.000679	90	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 240 of 352

65
----

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Silver	0.130	$\mathrm{mg/L}$	1	0.125	< 0.000700	104	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${\bf Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.130	$\mathrm{mg/L}$	1	0.125	< 0.000700	104	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Arsenic	0.508	mg/L	1	0.500	< 0.00850	102	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.512	mg/L	1	0.500	< 0.00850	102	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Barium	1.11	$_{ m mg/L}$	1	1.00	0.047	106	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.11	mg/L	1	1.00	0.047	106	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 241 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0261	m mg/L	1	0.0250	< 0.00120	104	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0245	$_{ m mg/L}$	1	0.0250	< 0.00120	98	75 - 125	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

MSSpike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Cadmium 0.250 < 0.00110 0.262 mg/L105 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.264	mg/L	1	0.250	< 0.00110	106	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Cobalt 0.2630.250< 0.00170 105 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.264	mg/L	1	0.250	< 0.00170	106	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 242 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Chromium	0.107	m mg/L	1	0.100	< 0.00201	107	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.108	mg/L	1	0.100	< 0.00201	108	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

MSSpike Rec. Matrix Limit Param Result Units Dil. Amount Result Rec. < 0.00129 Total Copper 0.130 mg/L0.125 104 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.132	mg/L	1	0.125	< 0.00129	106	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Nickel 0.2610.250< 0.00271 104 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPD Limit 0.267 0.250 75 - 125 20 Total Nickel mg/L< 0.00271107

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 243 of 352

65
----

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.487	$\mathrm{mg/L}$	1	0.500	< 0.00460	97	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.491	mg/L	1	0.500	< 0.00460	98	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

MSRec. Spike Matrix Limit Param Result Units Dil. Amount Result Rec. 0.268 107 Total Antimony mg/L0.250 < 0.015075 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.271	mg/L	1	0.250	< 0.0150	108	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Limit Rec. Total Selenium 0.459< 0.0106 92 mg/L0.50075 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.478	mg/L	1	0.500	< 0.0106	96	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 244 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Tin	0.321	m mg/L	1	0.300	< 0.0597	107	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.323	$_{ m mg/L}$	1	0.300	< 0.0597	108	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

MSRec. Spike Matrix Limit Param Units Dil. Result Result Amount Rec. Total Thallium 0.538mg/L0.500< 0.0223108 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.548	mg/L	1	0.500	< 0.0223	110	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR
Prep Batch: 44317 QC Preparation: 2008-08-22 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Vanadium 0.2580.250< 0.00132 103 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.265	mg/L	1	0.250	< 0.00132	106	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171192

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 245 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Zinc	0.236	m mg/L	1	0.250	< 0.000679	94	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.239	mg/L	1	0.250	< 0.000679	96	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 170843

QC Batch: 51771 Date Analyzed: 2008-08-25 Analyzed By: TP Prep Batch: 44397 QC Preparation: 2008-08-25 Prepared By: TP

MSSpike Rec. Matrix Limit Param Dil. Amount Result Result Units Rec. 93 Total Mercury 0.000926mg/L0.00100 < 0.0000251 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.000916	mg/L	1	0.00100	< 0.0000251	92	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171733

QC Batch: 51772 Date Analyzed: 2008-08-25 Analyzed By: TP
Prep Batch: 44397 QC Preparation: 2008-08-25 Prepared By: TP

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 0.0008970.00100 < 0.0000251 Total Mercury mg/L90 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPD Limit 75 - 125 Total Mercury 0.000910 mg/L 0.00100 < 0.0000251 20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 246 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Silver	0.126	m mg/L	1	0.125	< 0.000700	101	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.125	mg/L	1	0.125	< 0.000700	100	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

MSSpike Rec. Matrix Limit Param Result Units Dil. Amount Result Rec. 0.500 < 0.00850 75 - 125 Total Arsenic 0.486mg/L97

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.515	mg/L	1	0.500	< 0.00850	103	75 - 125	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Barium 1.03 1.00 < 0.00180 103 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.03	mg/L	1	1.00	< 0.00180	103	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 247 of 352

65

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0234	$_{ m mg/L}$	1	0.0250	< 0.00120	94	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0230	mg/L	1	0.0250	< 0.00120	92	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

MSSpike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Cadmium 0.259 0.250 < 0.00110 mg/L104 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.260	mg/L	1	0.250	< 0.00110	104	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Cobalt 0.2580.250< 0.00170 103 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.258	mg/L	1	0.250	< 0.00170	103	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 248 of 352

65

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Chromium	0.105	$_{ m mg/L}$	1	0.100	< 0.00201	105	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.106	mg/L	1	0.100	< 0.00201	106	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	Units	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.127	mg/L	1	0.125	< 0.00129	102	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.126	mg/L	1	0.125	< 0.00129	101	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Nickel	0.255	$_{ m mg/L}$	1	0.250	< 0.00271	102	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.254	mg/L	1	0.250	< 0.00271	102	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 249 of 352

65

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.504	m mg/L	1	0.500	< 0.00460	101	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.502	mg/L	1	0.500	< 0.00460	100	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Antimony	0.253	$_{ m mg/L}$	1	0.250	< 0.0150	101	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix				RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.261	$_{ m mg/L}$	1	0.250	< 0.0150	104	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Selenium	0.486	$_{ m mg/L}$	1	0.500	< 0.0106	97	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.496	mg/L	1	0.500	< 0.0106	99	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 250 of 352

65

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Tin	0.315	m mg/L	1	0.300	< 0.0597	105	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.322	mg/L	1	0.300	< 0.0597	107	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

MSRec. Spike Matrix Limit Param Units Dil. Result Result Amount Rec. Total Thallium 0.530 mg/L0.500 < 0.0223106 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.530	mg/L	1	0.500	< 0.0223	106	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR
Prep Batch: 44405 QC Preparation: 2008-08-26 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Vanadium 0.2530.250< 0.00132 101 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPD Limit 0.2520.250 75 - 125 20 Total Vanadium mg/L< 0.00132 101

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 171342

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 251 of 352

65

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Zinc	0.258	m mg/L	1	0.250	< 0.000679	103	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.258	$\mathrm{mg/L}$	1	0.250	< 0.000679	103	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

SpikeMSRec. Matrix Limit Param Units Dil. Amount Result Result Rec. Total Silver 0.122 mg/L0.125 < 0.000700 98 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\mathbf{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.126	mg/L	1	0.125	< 0.000700	101	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Arsenic 0.4370.500 < 0.00850 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Limit RPD Limit Rec. 0.448 0.500 75 - 125 20 Total Arsenic mg/L< 0.00850 90

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 252 of 352

65

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Barium	0.902	$\mathrm{mg/L}$	1	1.00	0.007	90	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	0.940	mg/L	1	1.00	0.007	93	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

MSSpike Rec. Matrix Result Limit Param Units Dil. Amount Result Rec. Total Beryllium < 0.00120 0.0230 mg/L0.025092 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0230	mg/L	1	0.0250	< 0.00120	92	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Cadmium 0.215 0.250< 0.00110 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Limit RPD Limit Rec. 0.219 0.250 20 Total Cadmium mg/L< 0.00110 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 253 of 352

65

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Cobalt	0.211	$\mathrm{mg/L}$	1	0.250	< 0.00170	84	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.225	mg/L	1	0.250	< 0.00170	90	75 - 125	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Chromium	2.67	$_{ m mg/L}$	1	0.100	2.58	90	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	2.69	mg/L	1	0.100	2.58	110	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Copper	0.127	$_{ m mg/L}$	1	0.125	0.013	91	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.135	mg/L	1	0.125	0.013	98	75 - 125	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 254 of 352

65

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Nickel	0.284	$\mathrm{mg/L}$	1	0.250	0.089	78	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.288	$_{ m mg/L}$	1	0.250	0.089	80	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

MSSpike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Lead 0.500 < 0.00460 75 - 125 0.459 mg/L92

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.459	mg/L	1	0.500	< 0.00460	92	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 0.2560.2500.048 Total Antimony mg/L 83 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.279	mg/L	1	0.250	0.048	92	75 - 125	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 255 of 352

65

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Selenium	0.540	$\mathrm{mg/L}$	1	0.500	0.144	79	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.557	mg/L	1	0.500	0.144	83	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

MSRec. Spike Matrix Limit Param Result Units Dil. Result Amount Rec. Total Tin 0.232 77 75 - 125 mg/L0.300 < 0.0597

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.281	mg/L	1	0.300	< 0.0597	94	75 - 125	19	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Limit Rec. Total Thallium 0.436< 0.0223 mg/L0.50075 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.445	mg/L	1	0.500	< 0.0223	89	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 256 of 352

65

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Vanadium	0.239	m mg/L	1	0.250	0.028	84	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.245	mg/L	1	0.250	0.028	87	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172137

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR
Prep Batch: 44510 QC Preparation: 2008-08-29 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	Units	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Zinc	0.204	mg/L	1	0.250	0.003	80	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.230	mg/L	1	0.250	0.003	91	75 - 125	12	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Silver	0.115	$_{ m mg/L}$	1	0.125	< 0.000700	92	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.114	mg/L	1	0.125	< 0.000700	91	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 257 of 352

65

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.507	$\mathrm{mg/L}$	1	0.500	< 0.00850	101	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.472	mg/L	1	0.500	< 0.00850	94	75 - 125	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

MSSpike Matrix Rec. Limit Param Result Units Dil. Amount Result Rec. Total Barium < 0.00180 0.864 mg/L1.00 86 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	0.874	mg/L	1	1.00	< 0.00180	87	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Beryllium 0.0230< 0.00120 92 mg/L0.025075 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0260	mg/L	1	0.0250	< 0.00120	104	75 - 125	12	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 258 of 352

65

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Cadmium	0.220	m mg/L	1	0.250	< 0.00110	88	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.223	mg/L	1	0.250	< 0.00110	89	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

MSSpike Rec. Matrix Result Limit Param Units Dil. Amount Result Rec. Total Cobalt 0.250 < 0.00170 0.214 mg/L86 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.219	mg/L	1	0.250	< 0.00170	88	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Chromium 0.0890 0.100 < 0.00201 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Rec. Limit RPD Limit 20 Total Chromium 0.0890 mg/L0.100 < 0.00201 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 259 of 352

65

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.105	$\mathrm{mg/L}$	1	0.125	< 0.00129	84	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.107	mg/L	1	0.125	< 0.00129	86	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

MSSpike Rec. Matrix Limit Param Result Units Dil. Amount Result Rec. Total Nickel 0.250 0.210 mg/L< 0.0027184 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.220	mg/L	1	0.250	< 0.00271	88	75 - 125	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit 92 Total Lead 0.4590.500 < 0.00460 mg/L75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

MSD Spike Matrix Rec. RPD Param Result Units Dil. Amount Result Limit RPD Limit Rec. 0.500 20 Total Lead 0.458mg/L< 0.00460 92 75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

Work Order: 8080828 HELSTF GROUNDWATER Page Number: 260 of 352

65

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Antimony	0.233	m mg/L	1	0.250	< 0.0150	93	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	$\operatorname{Dil}$ .	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.251	mg/L	1	0.250	< 0.0150	100	75 - 125	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Selenium	0.917	$_{ m mg/L}$	1	0.500	0.534	77	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.959	$_{ m mg/L}$	1	0.500	0.534	85	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Tin	0.234	$_{ m mg/L}$	1	0.300	< 0.0597	78	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.257	mg/L	1	0.300	< 0.0597	86	75 - 125	9	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

Page Number: 261 of 352

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Thallium	0.399	m mg/L	1	0.500	< 0.0223	80	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.402	mg/L	1	0.500	< 0.0223	80	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

		MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param		$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Vanadium	1	0.183	$_{ m mg/L}$	1	0.250	< 0.00132	73	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.217	mg/L	1	0.250	< 0.00132	87	75 - 125	17	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR
Prep Batch: 44581 QC Preparation: 2008-09-03 Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Zinc	0.238	$_{ m mg/L}$	1	0.250	0.025	85	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.260	mg/L	1	0.250	0.025	94	75 - 125	9	20

<sup>&</sup>lt;sup>1</sup> Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

65

Matrix Spike (MS-1) Spiked Sample: 172467

QC Batch: 52084 Prep Batch: 44653 Date Analyzed: 2008-09-04 QC Preparation: 2008-09-04

Analyzed By: TP Prepared By: TP

Page Number: 262 of 352

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Mercury	0.000864	m mg/L	1	0.00100	< 0.0000251	86	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.000823	$\mathrm{mg/L}$	1	0.00100	< 0.0000251	82	75 - 125	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52085 Prep Batch: 44653 Date Analyzed: 2008-09-04 QC Preparation: 2008-09-04 Analyzed By: TP Prepared By: TP

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$
Total Mercury	0.000887	mg/L	1	0.00100	< 0.0000251	89	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	A mount	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.000858	mg/L	1	0.00100	< 0.0000251	86	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05

Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	${f Limit}$
Total Silver	0.135	$\mathrm{mg/L}$	1	0.125	< 0.000700	108	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		Rec.		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.134	${ m mg/L}$	1	0.125	< 0.000700	107	75 - 125	1	20

00

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

Page Number: 263 of 352

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.509	$_{ m mg/L}$	1	0.500	< 0.00850	102	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.506	mg/L	1	0.500	< 0.00850	101	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$
Total Barium	0.992	mg/L	1	1.00	0.007	98	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	0.992	mg/L	1	1.00	0.007	98	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0237	${ m mg/L}$	1	0.0250	< 0.00120	95	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0235	mg/L	1	0.0250	< 0.00120	94	75 - 125	1	20

65

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

Page Number: 264 of 352

MSSpike Matrix Rec. Limit Param Result Amount Result Units Dil. Rec. 0.25075 - 125 Total Cadmium 0.207 < 0.00110 83 mg/L

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.207	${ m mg/L}$	1	0.250	< 0.00110	83	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Cobalt 0.217 < 0.00170 mg/L0.25075 - 125 1 87

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.216	mg/L	1	0.250	< 0.00170	86	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662

Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Chromium 0.715 mg/L0.63 85 75 - 125 0.100

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.710	mg/L	1	0.100	0.63	80	75 - 125	1	20

65

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

Page Number: 265 of 352

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Copper	0.127	m mg/L	1	0.125	0.012	92	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.126	m mg/L	1	0.125	0.012	91	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		Rec.
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Nickel	0.215	mg/L	1	0.250	0.003	85	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.215	mg/L	1	0.250	0.003	85	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05

Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.432	$\mathrm{mg/L}$	1	0.500	< 0.00460	86	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.421	mg/L	1	0.500	< 0.00460	84	75 - 125	3	20

65

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05

Analyzed By: RR Prepared By: KV

Page Number: 266 of 352

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Antimony	0.263	$\mathrm{mg/L}$	1	0.250	< 0.0150	105	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.250	mg/L	1	0.250	< 0.0150	100	75 - 125	5	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Selenium	0.633	mg/L	1	0.500	0.155	96	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.645	mg/L	1	0.500	0.155	98	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	${f Limit}$
Total Tin	0.256	m mg/L	1	0.300	< 0.0597	85	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.253	${ m mg/L}$	1	0.300	< 0.0597	84	75 - 125	1	20

65

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05

Analyzed By: RR Prepared By: KV

Page Number: 267 of 352

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Thallium	0.398	m mg/L	1	0.500	< 0.0223	80	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.403	$\mathrm{mg/L}$	1	0.500	< 0.0223	81	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$
Total Vanadium	0.253	mg/L	1	0.250	0.017	94	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.253	mg/L	1	0.250	0.017	94	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172638

QC Batch: 52131 Prep Batch: 44662 Date Analyzed: 2008-09-08 QC Preparation: 2008-09-05

Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Zinc	0.246	m mg/L	1	0.250	0.015	92	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.243	mg/L	1	0.250	0.015	91	75 - 125	1	20

65

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

Page Number: 268 of 352

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Silver	0.132	m mg/L	1	0.125	< 0.000700	106	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	Units	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.137	mg/L	1	0.125	< 0.000700	110	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.545	mg/L	1	0.500	< 0.00850	109	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.549	mg/L	1	0.500	< 0.00850	110	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Barium	0.988	$\mathrm{mg/L}$	1	1.00	0.006	98	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.02	mg/L	1	1.00	0.006	101	75 - 125	3	20

65

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09

Analyzed By: RR Prepared By: KV

Page Number: 269 of 352

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Beryllium	0.0240	$_{ m mg/L}$	1	0.0250	< 0.00120	96	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0250	mg/L	1	0.0250	< 0.00120	100	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Cadmium	0.224	mg/L	1	0.250	< 0.00110	90	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.231	mg/L	1	0.250	< 0.00110	92	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736

Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cobalt	0.227	m mg/L	1	0.250	< 0.00170	91	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.234	mg/L	1	0.250	< 0.00170	94	75 - 125	3	20

69

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

Page Number: 270 of 352

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Chromium	0.102	m mg/L	1	0.100	0.009	93	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.105	$\mathrm{mg/L}$	1	0.100	0.009	96	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$
Total Copper	0.120	mg/L	1	0.125	0.01	88	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.125	mg/L	1	0.125	0.01	92	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09

Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Nickel	0.225	$\mathrm{mg/L}$	1	0.250	< 0.00271	90	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.232	${ m mg/L}$	1	0.250	< 0.00271	93	75 - 125	3	20

65

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09

Analyzed By: RR Prepared By: KV

Page Number: 271 of 352

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.467	$\mathrm{mg/L}$	1	0.500	< 0.00460	93	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.480	m mg/L	1	0.500	< 0.00460	96	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Antimony	0.253	mg/L	1	0.250	< 0.0150	101	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.256	mg/L	1	0.250	< 0.0150	102	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09

Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Selenium	0.530	$\mathrm{mg/L}$	1	0.500	0.024	101	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.546	${ m mg/L}$	1	0.500	0.024	104	75 - 125	3	20

60

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

Page Number: 272 of 352

MSMatrix Rec. Spike Limit Param Result Dil. Units Amount Result Rec. 0.27975 - 125 Total Tin 0.300< 0.059793 mg/L

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	$\operatorname{Dil}$ .	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.285	mg/L	1	0.300	< 0.0597	95	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Limit Rec. Total Thallium 0.430< 0.0223 mg/L0.50086 75 - 125 1

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		Rec.		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.443	mg/L	1	0.500	< 0.0223	89	75 - 125	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09

Analyzed By: RR Prepared By: KV

MSSpike Matrix Rec. Param Result Units Dil. Amount Result Rec. Limit Total Vanadium 0.269 mg/L0.028 96 75 - 125 0.250

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.278	${ m mg/L}$	1	0.250	0.028	100	75 - 125	3	20

65

Matrix Spike (MS-1) Spiked Sample: 172795

QC Batch: 52201 Prep Batch: 44736 Date Analyzed: 2008-09-09 QC Preparation: 2008-09-09 Analyzed By: RR Prepared By: KV

Page Number: 273 of 352

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Zinc	0.240	m mg/L	1	0.250	0.009	92	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.246	$\mathrm{mg/L}$	1	0.250	0.009	95	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Silver	0.118	mg/L	1	0.125	< 0.000700	94	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Silver	0.119	mg/L	1	0.125	< 0.000700	95	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Arsenic	0.484	m mg/L	1	0.500	< 0.00850	97	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Arsenic	0.489	mg/L	1	0.500	< 0.00850	98	75 - 125	1	20

65

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

Page Number: 274 of 352

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Barium	1.05	$\mathrm{mg/L}$	1	1.00	< 0.00180	105	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Barium	1.06	$\mathrm{mg/L}$	1	1.00	< 0.00180	106	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Bervllium	0.0242	mg/L	1	0.0250	< 0.00120	97	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Beryllium	0.0246	mg/L	1	0.0250	< 0.00120	98	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11

Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cadmium	0.251	m mg/L	1	0.250	< 0.00110	100	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cadmium	0.252	mg/L	1	0.250	< 0.00110	101	75 - 125	0	20

60

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

Page Number: 275 of 352

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Cobalt	0.244	$\mathrm{mg/L}$	1	0.250	< 0.00170	98	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Cobalt	0.246	$\mathrm{mg/L}$	1	0.250	< 0.00170	98	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		${ m Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Chromium	0.0980	$_{ m mg/L}$	1	0.100	< 0.00201	98	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Chromium	0.0980	mg/L	1	0.100	< 0.00201	98	75 - 125	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	${f Limit}$
Total Copper	0.120	m mg/L	1	0.125	< 0.00129	96	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Copper	0.120	${ m mg/L}$	1	0.125	< 0.00129	96	75 - 125	0	20

65

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11

Analyzed By: RR Prepared By: KV

Page Number: 276 of 352

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	$\mathrm{Dil}.$	${f Amount}$	Result	Rec.	$\operatorname{Limit}$
Total Nickel	0.246	$\mathrm{mg/L}$	1	0.250	< 0.00271	98	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		${ m Rec.}$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Nickel	0.249	mg/L	1	0.250	< 0.00271	100	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Lead	0.522	mg/L	1	0.500	< 0.00460	104	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Lead	0.528	mg/L	1	0.500	< 0.00460	106	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11

Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Antimony	0.238	$\mathrm{mg/L}$	1	0.250	< 0.0150	95	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Antimony	0.247	$\mathrm{mg/L}$	1	0.250	< 0.0150	99	75 - 125	4	20

00

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

Page Number: 277 of 352

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Selenium	0.434	${ m mg/L}$	1	0.500	< 0.0106	87	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Selenium	0.439	${ m mg/L}$	1	0.500	< 0.0106	88	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Tin	0.306	mg/L	1	0.300	< 0.0597	102	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Tin	0.311	mg/L	1	0.300	< 0.0597	104	75 - 125	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11

Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Thallium	0.501	m mg/L	1	0.500	< 0.0223	100	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Thallium	0.510	$\mathrm{mg/L}$	1	0.500	< 0.0223	102	75 - 125	2	20

65

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11  $\begin{array}{ll} {\rm Analyzed~By:} & {\rm RR} \\ {\rm Prepared~By:} & {\rm KV} \end{array}$ 

Page Number: 278 of 352

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec.}$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Vanadium	0.251	${ m mg/L}$	1	0.250	< 0.00132	100	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		${ m Rec.}$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	Rec.	$_{ m Limit}$	RPD	$\operatorname{Limit}$
Total Vanadium	0.254	$\mathrm{mg/L}$	1	0.250	< 0.00132	102	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52279 Prep Batch: 44806 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: RR Prepared By: KV

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	$\mathrm{Rec}.$	$\operatorname{Limit}$
Total Zinc	0.241	$_{ m mg/L}$	1	0.250	0.001	96	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\operatorname{Rec}$ .		RPD
Param	Result	$\operatorname{Units}$	Dil.	${ m Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Zinc	0.243	mg/L	1	0.250	0.001	97	75 - 125	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1) Spiked Sample: 173107

QC Batch: 52284 Prep Batch: 44821 Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11 Analyzed By: TP Prepared By: TP

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${ m Amount}$	$\operatorname{Result}$	$\mathrm{Rec.}$	$\operatorname{Limit}$
Total Mercury	0.00138	$\mathrm{mg/L}$	1	0.00100	0.000385	100	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	Result	$\operatorname{Units}$	Dil.	${f Amount}$	Result	Rec.	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.00135	$\mathrm{mg/L}$	1	0.00100	0.000385	96	75 - 125	2	20

Work Order: 8080828 HELSTF GROUNDWATER

65

Matrix Spike (MS-1) Spiked Sample: 173041

QC Batch: 52287

Prep Batch: 44821

Date Analyzed: 2008-09-11 QC Preparation: 2008-09-11

Analyzed By: TP Prepared By: TP

Page Number: 279 of 352

	MS			$\operatorname{Spike}$	Matrix		$\mathrm{Rec}.$
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	${f Amount}$	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$
Total Mercury	0.000961	m mg/L	1	0.00100	< 0.0000251	96	75 - 125

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

	MSD			$_{ m Spike}$	Matrix		$\mathrm{Rec}.$		RPD
Param	$\operatorname{Result}$	$\operatorname{Units}$	Dil.	A mount	$\operatorname{Result}$	$\operatorname{Rec}$ .	$\operatorname{Limit}$	RPD	$\operatorname{Limit}$
Total Mercury	0.000997	$\mathrm{mg/L}$	1	0.00100	< 0.0000251	100	75 - 125	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Standard (ICV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Silver		$_{ m mg/L}$	0.125	0.127	102	90 - 110	2008-08-11

#### Standard (ICV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Arsenic		m mg/L	1.00	1.07	107	90 - 110	2008-08-11

### Standard (ICV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Barium		m mg/L	1.00	1.00	100	90 - 110	2008-08-11

#### Standard (ICV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

Page Number: 280 of 352

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${f Analyzed}$
Total Beryllium		m mg/L	1.00	1.03	103	90 - 110	2008-08-11

### Standard (ICV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cadmium		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-08-11

## Standard (ICV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			ICVs	ICVs	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Cobalt		$_{ m mg/L}$	1.00	1.07	107	90 - 110	2008-08-11

#### Standard (ICV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			${ m ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Chromium		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-08-11

## Standard (ICV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	IC Vs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Copper		m mg/L	1.00	1.01	101	90 - 110	2008-08-11

# Standard (ICV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		mg/L	1.00	1.05	105	90 - 110	2008-08-11

### Standard (ICV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

Page Number: 281 of 352

			$\mathrm{ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Lead		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-08-11

## Standard (ICV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Antimony		$_{ m mg/L}$	1.00	1.06	106	90 - 110	2008-08-11

#### Standard (ICV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${\bf Analyzed}$
Total Selenium		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-11

#### Standard (ICV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Tin		$_{ m mg/L}$	1.00	1.05	105	90 - 110	2008-08-11

#### Standard (ICV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

Page Number: 282 of 352

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Thallium		$\mathrm{mg/L}$	1.00	1.05	105	90 - 110	2008-08-11

### Standard (ICV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Vanadium		m mg/L	1.00	0.986	99	90 - 110	2008-08-11

## Standard (ICV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	$\mathrm{ICVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Zinc		$_{ m mg/L}$	1.00	1.05	105	90 - 110	2008-08-11

#### Standard (CCV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		mg/L	0.125	0.126	101	90 - 110	2008-08-11

## Standard (CCV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Arsenic		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-08-11

#### Standard (CCV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

Page Number: 283 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Barium		$\mathrm{mg/L}$	1.00	0.993	99	90 - 110	2008-08-11

#### Standard (CCV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${f Analyzed}$
Total Beryllium		m mg/L	1.00	1.00	100	90 - 110	2008-08-11

## Standard (CCV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	Analyzed
Total Cadmium		$_{ m mg/L}$	1.00	0.985	98	90 - 110	2008-08-11

#### Standard (CCV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cobalt		$_{ m mg/L}$	1.00	1.04	104	90 - 110	2008-08-11

## Standard (CCV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Chromium		$\mathrm{mg/L}$	1.00	0.980	98	90 - 110	2008-08-11

#### Standard (CCV-1)

QC Batch: 51313 Date Analyzed: 2008-08-11 Analyzed By: RR

			0.017.7	a. a	0/0/77	_	
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	Found	Percent	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Copper		m mg/L	1.00	0.989	99	90 - 110	2008-08-11

### Standard (CCV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

Page Number: 284 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		m mg/L	1.00	1.01	101	90 - 110	2008-08-11

## Standard (CCV-1)

 $QC \ Batch: \ 51313$ 

Date Analyzed: 2008-08-11

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Lead		$\mathrm{mg/L}$	1.00	0.993	99	90 - 110	2008-08-11

#### Standard (CCV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	Units	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Antimony		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-08-11

## Standard (CCV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Selenium		$_{ m mg/L}$	1.00	0.980	98	90 - 110	2008-08-11

## Standard (CCV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

D.	<b>.</b>	<b></b>	CCVs True	CCVs Found	CCVs Percent	Percent Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	$\operatorname{Recovery}$	$\operatorname{Limits}$	${ m Analyzed}$
Total Tin		m mg/L	1.00	1.02	102	90 - 110	2008-08-11

### Standard (CCV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

Page Number: 285 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Thallium		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-11

## Standard (CCV-1)

 $QC \ Batch: \ 51313$ 

Date Analyzed: 2008-08-11

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Vanadium		m mg/L	1.00	0.968	97	90 - 110	2008-08-11

#### Standard (CCV-1)

QC Batch: 51313

Date Analyzed: 2008-08-11

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	Flag	Units	$\operatorname{Conc.}$	$\operatorname{Conc.}$	$\operatorname{Recovery}$	Limits	Analyzed
Total Zinc		m mg/L	1.00	1.02	102	90 - 110	2008-08-11

## Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

Analyzed By: RR

			$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		$\mathrm{mg/L}$	0.125	0.125	100	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Page Number: 286 of 352

D	Fl	II:4 -	ICVs True	ICVs Found	ICVs Percent	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Total Arsenic		mg/L	1.00	0.984	98	90 - 110	2008-08-14
Standard (ICV	<b>7-1</b> )						

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Barium		mg/L	1.00	0.985	98	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Beryllium		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-08-14

#### Standard (ICV-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Cadmium		$_{ m mg/L}$	1.00	0.980	98	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

			$1 \mathrm{CVs}$	1 CVs	IC Vs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cobalt		m mg/L	1.00	1.03	103	90 - 110	2008-08-14

# Standard (ICV-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

35

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	Units	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Chromium		$\mathrm{mg/L}$	1.00	0.981	98	90 - 110	2008-08-14

#### Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

Page Number: 287 of 352

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Copper		m mg/L	1.00	0.988	99	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-14

#### Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Lead		$\mathrm{mg/L}$	1.00	0.983	98	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Antimony		mg/L	1.00	1.03	103	90 - 110	2008-08-14

#### Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Selenium		m mg/L	1.00	0.991	99	90 - 110	2008-08-14

#### Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

Page Number: 288 of 352

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Tin		m mg/L	1.00	1.01	101	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

			ICVs	ICVs	$\mathrm{ICVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		m mg/L	1.00	1.02	102	90 - 110	2008-08-14

#### Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

			ICVs	ICVs	${ m ICVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Vanadium		$\mathrm{mg/L}$	1.00	0.967	97	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Zinc		$_{ m mg/L}$	1.00	1.02	102	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

Page Number: 289 of 352

Param	$\operatorname{Flag}$	$\operatorname{Units}$	${ m CCVs} \ { m True} \ { m Conc.}$	$egin{array}{c} \mathrm{CCVs} \\ \mathrm{Found} \\ \mathrm{Conc.} \end{array}$	$egin{array}{c} { m CCVs} \\ { m Percent} \\ { m Recovery} \end{array}$	$egin{array}{l}  ext{Percent} \  ext{Recovery} \  ext{Limits} \end{array}$	$\begin{array}{c} {\rm Date} \\ {\rm Analyzed} \end{array}$
Total Silver		$\mathrm{mg/L}$	0.125	0.127	102	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Arsenic		mg/L	1.00	1.04	104	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Barium		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Beryllium		$_{ m mg/L}$	1.00	1.03	103	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cadmium		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-08-14

#### Standard (CCV-1)

65	

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	$\mathbf{Analyzed}$
Total Cobalt		m mg/L	1.00	1.06	106	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

Page Number: 290 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Chromium		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Copper		$_{ m mg/L}$	1.00	1.00	100	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	Units	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Lead		$_{ m mg/L}$	1.00	1.02	102	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51427

Date Analyzed: 2008-08-14

Page Number: 291 of 352

65

			$_{ m CCVs}$	$\frac{\text{CCVs}}{2}$	$_{ m CCVs}$	Percent	_
D	T)	TT 14	$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Total Antimony		$\mathrm{mg/L}$	1.00	1.05	105	90 - 110	2008-08-14
Standard (CC	(V-1)						
QC Batch: 51427			Date Analyz	zed: 2008-08-	14	Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	Analyzed
Total Selenium		$\mathrm{mg/L}$	1.00	0.998	100	90 - 110	2008-08-14
Standard (CC	CV-1)						
QC Batch: 514	127		Date Analyz	zed: 2008-08-	14	Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	Conc.	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Tin	-	$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-08-14
Standard (CC	$(\mathbf{V-1})$						
QC Batch: 514	127		Date Analyz	zed: 2008-08-	14	Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	Conc.	$\operatorname{Conc.}$	Recovery	$\operatorname{Limits}$	Analyzed
Total Thallium		m mg/L	1.00	1.04	104	90 - 110	2008-08-14
g. 1 1/gg							
Standard (CC	(V-1)						
QC Batch: 514	,		Date Analyz	zed: 2008-08-	14	Anal	yzed By: RR

# Standard (CCV-1)

Total Vanadium

Flag

Units

mg/L

Param

QC Batch: 51427 Date Analyzed: 2008-08-14 Analyzed By: RR

 $\mathrm{CCVs}$ 

Found

Conc.

0.990

 $\mathrm{CCVs}$ 

Percent

Recovery

99

Percent

Recovery

Limits

90 - 110

Date

Analyzed

2008-08-14

CCVs

True

Conc.

1.00

Page Number: 292 of 352

65			HELS				
Param	$\operatorname{Flag}$	$\operatorname{Units}$	${ m CCVs} \ { m True} \ { m Conc.}$	CCVs Found Conc.	$\begin{array}{c} {\rm CCVs} \\ {\rm Percent} \\ {\rm Recovery} \end{array}$	Percent Recovery Limits	$egin{array}{c} { m Date} \ { m Analyzed} \end{array}$
Total Zinc		${ m mg/L}$	1.00	1.05	105	90 - 110	2008-08-14
Standard (I QC Batch: 5	,		Date Anal	lyzed: 2008-08	s-14	Anal	lyzed By: RR
			$ICV_{\sigma}$	$ICV_{\sigma}$	$\mathbf{I}CV_{\sigma}$	Donoont	

			$\mathrm{ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${\bf Analyzed}$
Total Silver		m mg/L	0.125	0.125	100	90 - 110	2008-08-14

# Standard (ICV-1)

QC Batch: 51429 Dat	e Analyzed: 2008-08-14	Analyzed By:	RR
---------------------	------------------------	--------------	----

			${ m ICVs}$	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Arsenic		$_{ m mg/L}$	1.00	0.984	98	90 - 110	2008-08-14

# Standard (ICV-1)

OC Batch: 51429	Date Analyzed: 2008-08-14	Analyzed By: RR

			$\mathrm{ICVs}$	ICVs	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${\bf Analyzed}$
Total Barium		m mg/L	1.00	0.985	98	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR

			ICVs	$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Beryllium		m mg/L	1.00	1.01	101	90 - 110	2008-08-14

## Standard (ICV-1)

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Cadmium		mg/L	1.00	0.980	98	90 - 110	2008-08-14

#### Standard (ICV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

Page Number: 293 of 352

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	Units	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cobalt		m mg/L	1.00	1.03	103	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Chromium		$\mathrm{mg/L}$	1.00	0.981	98	90 - 110	2008-08-14

#### Standard (ICV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

			ICVs	ICVs	$\mathrm{ICVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Copper		$_{ m mg/L}$	1.00	0.988	99	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-08-14

#### Standard (ICV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Page Number: 294 of 352

65			HELSTI				
Param	$\operatorname{Flag}$	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	$\begin{array}{c} \text{Date} \\ \text{Analyzed} \end{array}$
Total Lead		$\mathrm{mg/L}$	1.00	0.983	98	90 - 110	2008-08-14
Standard (IC QC Batch: 53	CV-1)		Date Analy	zed: 2008-08-	14	Anal	yzed By: RR
			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${\bf Analyzed}$
Total Antimon	у	m mg/L	1.00	1.03	103	90 - 110	2008-08-14
Standard (IC	CV-1)		Date Analy	zed: 2008-08-	14	Anal	yzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	Units	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		${ m mg/L}$	1.00	0.991	99	90 - 110	2008-08-14

# Standard (ICV-1)

QC Batch: 51429	Date Analyzed:	2008-08-14	Analyzed By:	RR
-----------------	----------------	------------	--------------	----

			ICVs	$\mathrm{ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Tin		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-08-14

## Standard (ICV-1)

QC Batch: 51429 Date Analyzed: 2008-08-14 Analyzed By: RR

			$1 \mathrm{CV} \mathrm{s}$	IC Vs	IC Vs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		m mg/L	1.00	1.02	102	90 - 110	2008-08-14

## Standard (ICV-1)

neport Date.	October	٠,	2000
65			

			ICVs True	ICVs Found	$egin{array}{c}  ext{ICVs} \  ext{Percent} \end{array}$	Percent	Date
_						Recovery	
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	$\operatorname{Recovery}$	$\operatorname{Limits}$	Analyzed
Total Vanadium		$\mathrm{mg/L}$	1.00	0.967	97	90 - 110	2008-08-14

#### Standard (ICV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

Page Number: 295 of 352

			${ m ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Zinc		m mg/L	1.00	1.02	102	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		$_{ m mg/L}$	0.125	0.130	104	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Arsenic		$\mathrm{mg/L}$	1.00	1.06	106	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

Analyzed By: RR

			CCVs	CCVs	$\mathrm{CC}\mathrm{Vs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Barium		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Beryllium		${ m mg/L}$	1.00	1.05	105	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

Page Number: 296 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Cadmium		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cobalt		m mg/L	1.00	1.08	108	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Chromium		m mg/L	1.00	1.03	103	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

			CCVs	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Copper		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-08-14

#### Standard (CCV-1)

 $QC \ Batch: \ 51429$ 

Date Analyzed: 2008-08-14

		CCVs	CCVs	CCVs	Percent	D-4-
		$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param Flag	Units	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel	${ m mg/L}$	1.00	1.07	107	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

Page Number: 297 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Lead		m mg/L	1.00	1.04	104	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Antimony		m mg/L	1.00	1.08	108	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		$_{ m mg/L}$	1.00	1.02	102	90 - 110	2008-08-14

## Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Analyzed By: RR

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Tin		$_{ m mg/L}$	1.00	1.08	108	90 - 110	2008-08-14

#### Standard (CCV-1)

QC Batch: 51429

Date Analyzed: 2008-08-14

Page Number: 298 of 352

00			HELSIF G	ROUNDW.	A1ER		
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$egin{array}{c} \mathrm{CCVs} \\ \mathrm{True} \\ \mathrm{Conc.} \end{array}$	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	$\begin{array}{c} \text{Date} \\ \text{Analyzed} \end{array}$
Total Thallium	Į.	$\mathrm{mg/L}$	1.00	1.08	108	90 - 110	2008-08-14
Standard (CC	CV-1)						
QC Batch: 51	429		Date Analyzed	: 2008-08-	14	Anal	yzed By: RR
			$rac{ ext{CCVs}}{ ext{True}}$	${ m CCVs} \ { m Found}$	${ m CCVs} \ { m Percent}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	$rac{Date}{ ext{Analyzed}}$
Total Vanadiun	n	m mg/L	1.00	1.01	101	90 - 110	2008-08-14
Standard (CC	CV-1)						
QC Batch: 51	429		Date Analyzed	: 2008-08-	14	Anal	yzed By: RR
Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed

## Standard (ICV-1)

Total Zinc

QC Batch:	51.475	Date Analyzed:	2008-08-15	Analyzed By:	TP
QU Daten.	91419	Date Analyzed.	2000-00-19	Anaryzeu by.	11

1.07

107

90 - 110

2008-08-14

1.00

mg/L

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Mercury		m mg/L	0.00100	0.000977	98	90 - 110	2008-08-15

## Standard (CCV-1)

QC Batch: 51475 Date Analyzed: 2008-08-15 Analyzed By: TP

			CCVs	CCVs	CCVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Mercury		m mg/L	0.00100	0.00102	102	90 - 110	2008-08-15

## Standard (ICV-1)

Page Number: 299 of 352

			112251	T GROOTE W	711 1510		
			ICVs	ICVs	${ m ICVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	$\operatorname{Limits}$	${f Analyzed}$
Total Silver		${ m mg/L}$	0.125	0.127	102	90 - 110	2008-08-20

#### Standard (ICV-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Arsenic		$\mathrm{mg/L}$	1.00	1.05	105	90 - 110	2008-08-20

## Standard (ICV-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR

			ICVs	ICVs	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Barium		mg/L	1.00	1.01	101	90 - 110	2008-08-20

#### Standard (ICV-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR

			${ m ICVs}$	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Beryllium		$_{ m mg/L}$	1.00	1.04	104	90 - 110	2008-08-20

## Standard (ICV-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR

			IC Vs	$1 \mathrm{CV} \mathrm{s}$	IC Vs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Cadmium		m mg/L	1.00	1.03	103	90 - 110	2008-08-20

#### Standard (ICV-1)

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${\bf Analyzed}$
Total Cobalt		m mg/L	1.00	1.05	105	90 - 110	2008-08-20

#### Standard (ICV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Analyzed By: RR

Page Number: 300 of 352

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Chromium		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-08-20

## Standard (ICV-1)

 $QC \ Batch: \ 51617$ 

Date Analyzed: 2008-08-20

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Copper		m mg/L	1.00	1.01	101	90 - 110	2008-08-20

#### Standard (ICV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		m mg/L	1.00	1.07	107	90 - 110	2008-08-20

## Standard (ICV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Analyzed By: RR

Analyzed By: RR

			$1 \mathrm{CVs}$	ICVs	$1\mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Lead		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-20

#### Standard (ICV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Antimony		$\mathrm{mg/L}$	1.00	1.05	105	90 - 110	2008-08-20

#### Standard (ICV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Analyzed By: RR

Page Number: 301 of 352

			$rac{ m ICVs}{ m True}$	$egin{array}{l}  ext{ICVs} \  ext{Found} \end{array}$	$egin{array}{l}  ext{ICVs} \  ext{Percent} \end{array}$	$rac{ ext{Percent}}{ ext{Recovery}}$	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	$\begin{array}{c} { m Analyzed} \end{array}$
Total Selenium		$\mathrm{mg/L}$	1.00	1.06	106	90 - 110	2008-08-20

## Standard (ICV-1)

 $QC \ Batch: \ 51617$ 

Date Analyzed: 2008-08-20

Analyzed By: RR

			$\mathrm{ICVs}$	$\mathrm{ICVs}$	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Tin		$_{ m mg/L}$	1.00	1.03	103	90 - 110	2008-08-20

#### Standard (ICV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		$\mathrm{mg/L}$	1.00	1.08	108	90 - 110	2008-08-20

## Standard (ICV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Analyzed By: RR

			$1 \mathrm{CVs}$	ICVs	$1 \mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Vanadium		$\mathrm{mg/L}$	1.00	1.00	100	90 - 110	2008-08-20

## Standard (ICV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Page Number: 302 of 352

			$_{ m ICVs}$	ICVs	$_{ m ICVs}$	Percent	_
D	T) I	TT 1.	$\operatorname{True}$	Found	Percent	Recovery	Date
Param Total Zinc	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed 2008-08-20
Total Zinc		m mg/L	1.00	0.998	100	90 - 110	2008-08-20
Standard (CCV	/-1)						
QC Batch: 5161	7		Date Analy	zed: 2008-08-	20	Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	$\mathbf{A}$ $\mathbf{n}$ $\mathbf{a}$ $\mathbf{l}$ $\mathbf{y}$ $\mathbf{z}$ $\mathbf{e}$ $\mathbf{d}$
Total Silver		$\mathrm{mg/L}$	0.125	0.128	102	90 - 110	2008-08-20
Standard (CCV	/- <b>1</b> )						
QC Batch: 5161	7		Date Analy	zed: 2008-08-	20	Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Arsenic		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-08-20
Standard (CCV	/- <b>1</b> )						
QC Batch: 5161	.7		Date Analy	zed: 2008-08-	20	Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Barium		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-20
Standard (CCV	7-1)						
QC Batch: 5161	7		Date Analy	zed: 2008-08-	20	${\rm Anal}$	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date

## Standard (CCV-1)

Total Beryllium

Flag

Units

mg/L

Param

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR

Conc.

1.00

 ${\rm Conc.}$ 

1.03

Recovery

103

Limits

90 - 110

Analyzed

2008-08-20

report	Date.	October	ι,	2000
65				

			$\operatorname{CCVs}$	$\mathrm{CCVs}$	$_{ m CCVs}$	Percent	<b>.</b>
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${\bf Analyzed}$
Total Cadmium		${ m mg/L}$	1.00	1.02	102	90 - 110	2008-08-20

## Standard (CCV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Analyzed By: RR

Page Number: 303 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cobalt		$\mathrm{mg/L}$	1.00	1.05	105	90 - 110	2008-08-20

## Standard (CCV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Chromium		$_{ m mg/L}$	1.00	1.02	102	90 - 110	2008-08-20

## Standard (CCV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Copper		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-20

## Standard (CCV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Analyzed By: RR

			CCVs	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		m mg/L	1.00	1.07	107	90 - 110	2008-08-20

## Standard (CCV-1)

QC Batch: 51617

Date Analyzed: 2008-08-20

Page Number: 304 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Lead		m mg/L	1.00	1.01	101	90 - 110	2008-08-20

#### Standard (CCV-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${f Analyzed}$
Total Antimony		m mg/L	1.00	1.02	102	90 - 110	2008-08-20

## Standard (CCV-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		mg/L	1.00	1.03	103	90 - 110	2008-08-20

#### Standard (CCV-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Tin		$_{ m mg/L}$	1.00	1.03	103	90 - 110	2008-08-20

## Standard (CCV-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR

			CCVs	$\rm CCVs$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		$\mathrm{mg/L}$	1.00	0.994	99	90 - 110	2008-08-20

## Standard (CCV-1)

Page Number: 305 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	Units	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Vanadium		mg/L	1.00	0.994	99	90 - 110	2008-08-20

#### Standard (CCV-1)

QC Batch: 51617 Date Analyzed: 2008-08-20 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Zinc		$_{ m mg/L}$	1.00	0.992	99	90 - 110	2008-08-20

## Standard (ICV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Silver		$_{ m mg/L}$	0.125	0.127	102	90 - 110	2008-08-22

#### Standard (ICV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Arsenic		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-08-22

## Standard (ICV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Barium		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-08-22

#### Standard (ICV-1)

			${ m ICVs}$	${ m ICVs}$	${ m ICVs}$	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	Conc.	Conc.	Recovery	Limits	Analyzed
Total Beryllium		mg/L	1.00	1.01	101	90 - 110	2008-08-22
Standard (ICV-1	1)						
QC Batch: 51695			Date Analyz	ed: 2008-08-2	22	Anal	yzed By: RR
			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Cadmium		m mg/L	1.00	1.01	101	90 - 110	2008-08-22
QC Batch: 51695			Date Analyz	ed: 2008-08-2	22	Anal	yzed By: RR
			TOTA	T.C.T.	T.C.T.	<b>.</b>	
			ICVs	ICVs	ICVs Democrat	Percent	D.
Param			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	
	Elo.c	Ilmita	Cone	Cone	Dogorrows	Limita	Date
Total Coholt	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Total Cobalt	Flag	Units mg/L	Conc. 1.00	Conc. 1.01	Recovery 101	Limits 90 - 110	
Total Cobalt Standard (ICV-1							${\bf Analyzed}$
	1)			1.01	101	90 - 110	${\bf Analyzed}$
Standard (ICV-	1)		1.00	1.01	101	90 - 110	Analyzed 2008-08-22
Standard (ICV-	1)		1.00  Date Analyz	1.01 ed: 2008-08-2	101	90 - 110 Anal	Analyzed 2008-08-22
Standard (ICV-1	1)		1.00  Date Analyz  ICVs	1.01 ed: 2008-08-2	101 22 ICVs	90 - 110  Anal	Analyzed 2008-08-22 yzed By: RR

# Standard (ICV-1)

QC Batch: 51695

Date Analyzed: 2008-08-22

Analyzed By: RR

Analyzed By: RR

Page Number: 306 of 352

			$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$1\mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Copper		m mg/L	1.00	0.991	99	90 - 110	2008-08-22

## Standard (ICV-1)

QC Batch: 51695

Date Analyzed: 2008-08-22

Param	$\operatorname{Flag}$	$\operatorname{Units}$	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	$egin{array}{l}  ext{Percent} \  ext{Recovery} \  ext{Limits} \end{array}$	$egin{array}{c} { m Date} \ { m Analyzed} \end{array}$
Total Nickel		m mg/L	1.00	1.04	104	90 - 110	2008-08-22

## Standard (ICV-1)

QC Batch: 51695

Date Analyzed: 2008-08-22

Analyzed By: RR

Page Number: 307 of 352

			$\mathrm{ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Lead		m mg/L	1.00	1.00	100	90 - 110	2008-08-22

## Standard (ICV-1)

QC Batch: 51695

Date Analyzed: 2008-08-22

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Antimony		m mg/L	1.00	1.08	108	90 - 110	2008-08-22

#### Standard (ICV-1)

QC Batch: 51695

Date Analyzed: 2008-08-22

Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		$_{ m mg/L}$	1.00	1.03	103	90 - 110	2008-08-22

## Standard (ICV-1)

QC Batch: 51695

Date Analyzed: 2008-08-22

Analyzed By: RR

			$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${\bf Analyzed}$
Total Tin		m mg/L	1.00	1.00	100	90 - 110	2008-08-22

#### Standard (ICV-1)

QC Batch: 51695

Date Analyzed: 2008-08-22

Page Number: 308 of 352

65		HELSTI

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	Flag	Units	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Thallium		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-08-22

## Standard (ICV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Vanadium		mg/L	1.00	0.984	98	90 - 110	2008-08-22

## Standard (ICV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			$\mathrm{ICVs}$	$\mathrm{ICVs}$	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Zinc		$_{ m mg/L}$	1.00	0.988	99	90 - 110	2008-08-22

#### Standard (CCV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		m mg/L	0.125	0.124	99	90 - 110	2008-08-22

## Standard (CCV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			CCVs	CCVs	CCVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Arsenic		$\mathrm{mg/L}$	1.00	0.998	100	90 - 110	2008-08-22

#### Standard (CCV-1)

Page Number: 309 of 352

Limits

90 - 110

Analyzed

2008-08-22

65	
----	--

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	$\operatorname{Limits}$	Analyzed
Total Barium		mg/L	1.00	0.995	100	90 - 110	2008-08-22
Standard (CCV-1)	)						
QC Batch: 51695			Date Analyz	ed: 2008-08-2	22	Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	Conc.	Recovery	$\operatorname{Limits}$	Analyzed
Total Beryllium		mg/L	1.00	1.00	100	90 - 110	2008-08-22
QC Batch: 51695			Date Analyz	ed: 2008-08-2	22	Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Cadmium		m mg/L	1.00	0.993	99	90 - 110	2008-08-22
Standard (CCV-1)	)						
Standard (CCV-1)  QC Batch: 51695	)		Date Analyz	ed: 2008-08-2	22	Anal	yzed By: RR
, , ,	)		Date Analyz CCVs	ed: 2008-08-2 CCVs	22 CCVs	Anal Percent	yzed By: RR

## Standard (CCV-1)

Param

Total Cobalt

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

Conc.

0.991

Recovery

99

Conc.

1.00

Units

mg/L

Flag

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Chromium		m mg/L	1.00	0.987	99	90 - 110	2008-08-22

## Standard (CCV-1)

Page Number: 310 of 352

			${ m CCVs} \ { m True}$	${ m CCVs} \ { m Found}$	$rac{ ext{CCVs}}{ ext{Percent}}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Total Copper		m mg/L	1.00	0.978	98	90 - 110	2008-08-22

#### Standard (CCV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		mg/L	1.00	1.03	103	90 - 110	2008-08-22

## Standard (CCV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Lead		$_{ m mg/L}$	1.00	0.985	98	90 - 110	2008-08-22

#### Standard (CCV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Antimony		$_{ m mg/L}$	1.00	1.07	107	90 - 110	2008-08-22

## Standard (CCV-1)

QC Batch: 51695 Date Analyzed: 2008-08-22 Analyzed By: RR

			CCVs	CCVs	CCVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Selenium		m mg/L	1.00	0.996	100	90 - 110	2008-08-22

#### Standard (CCV-1)

Page Number: 311 of 352

65
----

-									
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent			
			$\operatorname{True}$	Found	Percent	Recovery	Date		
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed		
Total Tin		m mg/L	1.00	0.993	99	90 - 110	2008-08-22		
Standard (	CCV-1)								
QC Batch: 51695			Date Ana	Date Analyzed: 2008-08-22			Analyzed By: RR		

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-08-22

## Standard (CCV-1)

QC Batch: 51095 Date Analyzed: 2008-08-22 Analyzed By: RR	QC Batch: 51695	Date Analyzed:	2008-08-22	Analyzed By:	RR
---	-----------------	----------------	------------	--------------	----

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	Units	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Vanadium		m mg/L	1.00	0.976	98	90 - 110	2008-08-22

# Standard (CCV-1)

QC Batch:	51695	Date Analyzed:	2008-08-22	Analyzed By:	R.R.

			$\mathrm{CCVs}$	$\operatorname{CCVs}$	m CCVs	Percent	D .
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Zinc		mg/L	1.00	0.978	98	90 - 110	2008-08-22

## Standard (ICV-1)

QC Batch: 51771 Date Analyzed: 2008-08-25 Analyzed By: TP

			ICVs	$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Mercury		m mg/L	0.00100	0.000969	97	90 - 110	2008-08-25

## Standard (CCV-1)

QC Batch: 51771 Date Analyzed: 2008-08-25 Analyzed By: TP

			$rac{ ext{CCVs}}{ ext{True}}$	${ m CCVs}$ Found	$rac{ ext{CCVs}}{ ext{Percent}}$	$egin{array}{l}  ext{Percent} \  ext{Recovery} \end{array}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	$\operatorname{Recovery}$	$\operatorname{Limits}$	${ m Analyzed}$
Total Mercury		$\mathrm{mg/L}$	0.00100	0.000985	98	90 - 110	2008-08-25

## Standard (ICV-1)

QC Batch: 51772

Date Analyzed: 2008-08-25

Analyzed By: TP

Page Number: 312 of 352

			${ m ICVs}$	${ m ICVs}$	${ m ICVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Mercury		m mg/L	0.00100	0.000969	97	90 - 110	2008-08-25

## Standard (CCV-1)

QC Batch: 51772

Date Analyzed: 2008-08-25

Analyzed By: TP

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Mercury		$_{ m mg/L}$	0.00100	0.000985	98	90 - 110	2008-08-25

#### Standard (ICV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			$\mathrm{ICVs}$	ICVs	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Silver		m mg/L	0.125	0.125	100	90 - 110	2008-08-26

## Standard (ICV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			ICVs	$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Arsenic		m mg/L	1.00	0.986	99	90 - 110	2008-08-26

#### Standard (ICV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Page Number: 313 of 352

			$_{ m ICVs}$	ICVs	$_{ m ICVs}$	Percent	D .
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Barium		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-26
-							

#### Standard (ICV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Beryllium		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-26

## Standard (ICV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cadmium		$_{ m mg/L}$	1.00	0.990	99	90 - 110	2008-08-26

#### Standard (ICV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			$\mathrm{ICVs}$	$\mathrm{ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Cobalt		$_{ m mg/L}$	1.00	0.993	99	90 - 110	2008-08-26

## Standard (ICV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Chromium		m mg/L	1.00	0.991	99	90 - 110	2008-08-26

#### Standard (ICV-1)

			$rac{ m ICVs}{ m True}$	$egin{array}{l}  ext{ICVs} \  ext{Found} \end{array}$	$egin{array}{l}  ext{ICVs} \  ext{Percent} \end{array}$	Percent Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	${ m Analyzed}$
Total Copper		${ m mg/L}$	1.00	0.987	99	90 - 110	2008-08-26

#### Standard (ICV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

Page Number: 314 of 352

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		m mg/L	1.00	1.03	103	90 - 110	2008-08-26

#### Standard (ICV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Lead		m mg/L	1.00	0.987	99	90 - 110	2008-08-26

#### Standard (ICV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			ICVs	ICVs	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	Units	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Antimony		$\mathrm{mg/L}$	1.00	1.06	106	90 - 110	2008-08-26

## Standard (ICV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		$_{ m mg/L}$	1.00	0.994	99	90 - 110	2008-08-26

#### Standard (ICV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Page Number: 315 of 352

			ICVs	${ m ICVs}$	${ m ICVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${\bf Analyzed}$
Total Tin		m mg/L	1.00	0.984	98	90 - 110	2008-08-26
10021 1111		mg/L	1.00	0.304	<b>3</b> 0	30 - 110	2000-00

## Standard (ICV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		mg/L	1.00	1.02	102	90 - 110	2008-08-26

## Standard (ICV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Vanadium		$_{ m mg/L}$	1.00	0.983	98	90 - 110	2008-08-26

#### Standard (ICV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Zinc		$_{ m mg/L}$	1.00	0.978	98	90 - 110	2008-08-26

## Standard (CCV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			CCVs	CCVs	CCVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		m mg/L	0.125	0.129	103	90 - 110	2008-08-26

## Standard (CCV-1)

Work Order: 2020222 ΈR

Page Number: 316 of 352

neport Date. C	7, 2008	WOLK	Order.	0000040
55		HELSTF	GROU	NDWATI

			CCVs	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Arsenic		${ m mg/L}$	1.00	1.06	106	90 - 110	2008-08-26

## Standard (CCV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Barium		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-08-26

## Standard (CCV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	Analyzed
Total Beryllium		$_{ m mg/L}$	1.00	1.05	105	90 - 110	2008-08-26

## Standard (CCV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cadmium		$_{ m mg/L}$	1.00	1.08	108	90 - 110	2008-08-26

## Standard (CCV-1)

QC Batch: 51793 Date Analyzed: 2008-08-26 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cobalt		$\mathrm{mg/L}$	1.00	1.07	107	90 - 110	2008-08-26

## Standard (CCV-1)

respore Date.	OCCODE	., 2000
65		

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Chromium		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-08-26

## Standard (CCV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

Page Number: 317 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Copper		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-26

## Standard (CCV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		$\mathrm{mg/L}$	1.00	1.08	108	90 - 110	2008-08-26

# Standard (CCV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	Flag	Units	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Lead		m mg/L	1.00	1.00	100	90 - 110	2008-08-26

#### Standard (CCV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Antimony		mg/L	1.00	1.09	109	90 - 110	2008-08-26

## Standard (CCV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Param	$\operatorname{Flag}$	$\operatorname{Units}$	CCVs True Conc.	$\begin{array}{c} {\rm CCVs} \\ {\rm Found} \\ {\rm Conc.} \end{array}$	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Selenium	1108	mg/L	1.00	1.05	105	90 - 110	2008-08-26

 $QC\ Batch:\ 51793$ 

Date Analyzed: 2008-08-26

Analyzed By: RR

Page Number: 318 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Tin		m mg/L	1.00	1.09	109	90 - 110	2008-08-26

## Standard (CCV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	$\operatorname{Limits}$	Analyzed
Total Thallium		$\mathrm{mg/L}$	1.00	1.08	108	90 - 110	2008-08-26

#### Standard (CCV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Vanadium		$_{ m mg/L}$	1.00	1.02	102	90 - 110	2008-08-26

## Standard (CCV-1)

QC Batch: 51793

Date Analyzed: 2008-08-26

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	$\operatorname{Recovery}$	Limits	${ m Analyzed}$
Total Zinc		mg/L	1.00	1.03	103	90 - 110	2008-08-26

#### Standard (ICV-1)

 $QC\ Batch:\ 51924$ 

Date Analyzed: 2008-08-29

Page Number: 319 of 352

Analyzed By: RR

Date

Analyzed

2008-08-29

Percent

Recovery

Limits

90 - 110

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	$\mathbf{A}$ naly zed
Total Silver		$\mathrm{mg/L}$	0.125	0.125	100	90 - 110	2008-08-29
Standard (ICV	/- <b>1</b> )						
QC Batch: 519	24		Date Analy	zed: 2008-08-	29	Anal	yzed By: RR
			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Arsenic		$\mathrm{mg/L}$	1.00	0.988	99	90 - 110	2008-08-29
Standard (ICV	/-1)						
`	,		Data Analy	zod: 2008 08	20	Anal	wand Rw. RR
Standard (ICV QC Batch: 519	,		Date Analy	zed: 2008-08-	29	Anal	yzed By: RR
`	,		Date Analy ICVs	zed: 2008-08- ICVs	$^{29}$ ICVs	Anal Percent	yzed By: RR
`	,		Č				yzed By: RR Date
QC Batch: 519	,	${ m Units}$	${ m ICVs}$	ICVs	${ m ICVs}$	Percent Recovery Limits	$\begin{array}{c} \text{Date} \\ \text{Analyzed} \end{array}$
QC Batch: 519	24	Units mg/L	ICVs True	${ m ICVs} \ { m Found}$	$egin{array}{l}  ext{ICVs} \  ext{Percent} \end{array}$	Percent Recovery	Date
QC Batch: 519	Flag		ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	$\begin{array}{c} \text{Date} \\ \text{Analyzed} \end{array}$
QC Batch: 519  Param Total Barium	Flag Flag V-1)		ICVs True Conc.	ICVs Found Conc. 1.00	ICVs Percent Recovery 100	Percent Recovery Limits 90 - 110	$\begin{array}{c} \text{Date} \\ \text{Analyzed} \end{array}$
QC Batch: 519  Param Total Barium  Standard (ICV	Flag Flag V-1)		ICVs True Conc. 1.00	ICVs Found Conc. 1.00	ICVs Percent Recovery 100	Percent Recovery Limits 90 - 110	Date Analyzed 2008-08-29
QC Batch: 519  Param Total Barium  Standard (ICV	Flag Flag V-1)		ICVs True Conc. 1.00	ICVs Found Conc. 1.00	ICVs Percent Recovery 100	Percent Recovery Limits 90 - 110	Date Analyzed 2008-08-29
QC Batch: 519  Param Total Barium  Standard (ICV	Flag Flag V-1)		ICVs True Conc. 1.00  Date Analy	ICVs Found Conc. 1.00  zed: 2008-08-	ICVs Percent Recovery 100  100	Percent Recovery Limits 90 - 110  Anal Percent	Date Analyzed 2008-08-29

# Standard (ICV-1)

Total Cadmium

Flag

Units

mg/L

Standard (ICV-1)

QC Batch: 51924

Param

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR

Date Analyzed: 2008-08-29

ICVs

Found

Conc.

0.986

ICVs

Percent

Recovery

99

ICVs

True

Conc.

1.00

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Cobalt		m mg/L	1.00	1.02	102	90 - 110	2008-08-29

#### Standard (ICV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Analyzed By: RR

Page Number: 320 of 352

			ICVs	ICVs	${ m ICVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Chromium		$\mathrm{mg/L}$	1.00	0.987	99	90 - 110	2008-08-29

## Standard (ICV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Copper		m mg/L	1.00	0.992	99	90 - 110	2008-08-29

#### Standard (ICV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		$_{ m mg/L}$	1.00	1.04	104	90 - 110	2008-08-29

## Standard (ICV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Analyzed By: RR

			$1 \mathrm{CVs}$	ICVs	$1 \mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Lead		$\mathrm{mg/L}$	1.00	0.993	99	90 - 110	2008-08-29

#### Standard (ICV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Page Number: 321 of 352

			$rac{ ext{ICVs}}{ ext{True}}$	$egin{array}{l}  ext{ICVs} \  ext{Found} \end{array}$	$rac{ ext{ICVs}}{ ext{Percent}}$	Percent Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Antimony		$\mathrm{mg/L}$	1.00	1.08	108	90 - 110	2008-08-29

#### Standard (ICV-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		$\mathrm{mg/L}$	1.00	0.994	99	90 - 110	2008-08-29

## Standard (ICV-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	$\mathrm{ICVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Tin		$_{ m mg/L}$	1.00	1.00	100	90 - 110	2008-08-29

#### Standard (ICV-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR

			ICVs	${ m ICVs}$	$\mathrm{ICVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		$_{ m mg/L}$	1.00	1.02	102	90 - 110	2008-08-29

## Standard (ICV-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR

			$1 \mathrm{CVs}$	IC Vs	1 CVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${f Analyzed}$
Total Vanadium		m mg/L	1.00	0.979	98	90 - 110	2008-08-29

#### Standard (ICV-1)

Work Order: 8080828

Page Number: 322 of 352

65			HELSTF GROUNDWATER					
Param Total Zinc	Flag	$\begin{array}{c} \rm Units \\ \rm mg/L \end{array}$	ICVs True Conc. 1.00	ICVs Found Conc. 0.975	ICVs Percent Recovery 98	Percent Recovery Limits 90 - 110	Date Analyzed 2008-08-29	
Standard (C	,		Date Anal	yzed: 2008-08	-29	Anal	yzed By: RR	
Param Total Silver	Flag	Units mg/L	CCVs True Conc. 0.125	CCVs Found Conc. 0.127	CCVs Percent Recovery	Percent Recovery Limits 90 - 110	Date Analyzed 2008-08-29	
Standard (C	CCV-1) 51924		Date Anal	yzed: 2008-08	-29	Anal	yzed By: RR	

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Arsenic		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-08-29

# Standard (CCV-1)

QC Batch: 51924	Date Analyzed: $2008-08-29$	Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	Units	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Barium		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-08-29

## Standard (CCV-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR

			${ m CCVs} \ { m True}$	${ m CCVs} \ { m Found}$	${ m CCVs} \ { m Percent}$	$rac{ ext{Percent}}{ ext{Recovery}}$	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Total Beryllium		m mg/L	1.00	1.03	103	90 - 110	2008-08-29

## Standard (CCV-1)

Report	Date.	October	ι,	2000
65				

Param	Flag	${ m Units}$	CCVs True Conc.	${ m CCVs} \ { m Found} \ { m Conc.}$	$egin{array}{c} { m CCVs} \\ { m Percent} \\ { m Recovery} \end{array}$	$egin{array}{l}  ext{Percent} \  ext{Recovery} \  ext{Limits} \end{array}$	$egin{aligned}  ext{Date} \  ext{Analyzed} \end{aligned}$
Total Cadmium		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-08-29

## Standard (CCV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Analyzed By: RR

Page Number: 323 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cobalt		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-08-29

## Standard (CCV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Chromium		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-29

## Standard (CCV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${\bf Analyzed}$
Total Copper		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-29

## Standard (CCV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Analyzed By: RR

			CCVs	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		$\mathrm{mg/L}$	1.00	1.06	106	90 - 110	2008-08-29

## Standard (CCV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Page Number: 324 of 352

09			петэть	GROUNDWA	ALEK		
Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	$egin{array}{c}  ext{Date} \  ext{Analyzed} \end{array}$
Total Lead		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-08-29
Standard (C	CCV-1) 51924		Date Analyz	ed: 2008-08-2	29	Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Antimor	ny	m mg/L	1.00	1.04	104	90 - 110	2008-08-29
Standard (C	,						
QC Batch: 5	51924		Date Analyz	ed: 2008-08-2	29	Anal	yzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		${ m mg/L}$	1.00	1.03	103	90 - 110	2008-08-29

## Standard (CCV-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Tin		$_{ m mg/L}$	1.00	1.04	104	90 - 110	2008-08-29

## Standard (CCV-1)

QC Batch: 51924 Date Analyzed: 2008-08-29 Analyzed By: RR

			CCVs	$\rm CCVs$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Thallium		$\mathrm{mg/L}$	1.00	1.06	106	90 - 110	2008-08-29

## Standard (CCV-1)

Param	$\operatorname{Flag}$	$\operatorname{Units}$	$egin{array}{c} \mathrm{CCVs} \\ \mathrm{True} \\ \mathrm{Conc.} \end{array}$	$\begin{array}{c} { m CCVs} \\ { m Found} \\ { m Conc.} \end{array}$	$egin{array}{c} { m CCVs} \\ { m Percent} \\ { m Recovery} \end{array}$	$egin{array}{l}  ext{Percent} \  ext{Recovery} \  ext{Limits} \end{array}$	$\begin{array}{c} {\rm Date} \\ {\rm Analyzed} \end{array}$
Total Vanadium		m mg/L	1.00	1.00	100	90 - 110	2008-08-29

# Standard (CCV-1)

QC Batch: 51924

Date Analyzed: 2008-08-29

Analyzed By: RR

Page Number: 325 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Zinc		$\mathrm{mg/L}$	1.00	0.996	100	90 - 110	2008-08-29

# Standard (ICV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

			ICVs	ICVs	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		$\mathrm{mg/L}$	0.125	0.125	100	90 - 110	2008-09-03

### Standard (ICV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	Analyzed
Total Arsenic		mg/L	1.00	1.00	100	90 - 110	2008-09-03

# Standard (ICV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

			ICVs	$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Barium		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-09-03

# Standard (ICV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Page Number: 326 of 352

rechore	 000000	•
65		

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Beryllium	<del>-</del>	$\mathrm{mg/L}$	1.00	0.989	99	90 - 110	2008-09-03
Standard (ICV-1)							
Standard (ICV-1)  QC Batch: 52016			Date Analyzed	l: 2008-09-0	3	$Anal_{i}$	yzed By: RR
,			v				yzed By: RR
,			Date Analyzed ICVs True	l: 2008-09-0 ICVs Found	$_{ m ICVs}$ $_{ m Percent}$	Anal Percent Recovery	yzed By: RR Date
,	$\operatorname{Flag}$	$_{ m Units}$	m ICVs	ICVs	ICVs	Percent	·

# Standard (ICV-1)

QC Batch: 52016	Date Analyzed:	2008-09-03	Analyzed By:	RR
-----------------	----------------	------------	--------------	----

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Cobalt		$\mathrm{mg/L}$	1.00	0.989	99	90 - 110	2008-09-03

# Standard (ICV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Chromium		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-09-03

# Standard (ICV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$1\mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Copper		m mg/L	1.00	1.00	100	90 - 110	2008-09-03

# Standard (ICV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

65

			ICVs	${ m ICVs}$	${ m ICVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	Units	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		m mg/L	1.00	0.987	99	90 - 110	2008-09-03

### Standard (ICV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

Page Number: 327 of 352

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Lead		$\mathrm{mg/L}$	1.00	0.995	100	90 - 110	2008-09-03

### Standard (ICV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Antimony		mg/L	1.00	0.986	99	90 - 110	2008-09-03

### Standard (ICV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-09-03

# Standard (ICV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Tin		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-09-03

### Standard (ICV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Page Number: 328 of 352

Analyzed

2008-09-03

Limits

90 - 110

65	=		

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	Conc.	Recovery	Limits	Analyzed
Total Thallium		$\mathrm{mg/L}$	1.00	1.00	100	90 - 110	2008-09-03
Standard (ICV-1)	ı						
QC Batch: 52016			Date Analyzed:	2008-09-03		Anal	yzed By: RR
			${ m ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date

Conc.

1.02

Recovery

102

# Standard (ICV-1)

Total Vanadium

Param

QC Batch: 52016	Date Analyzed: 2008-09-03	Analyzed By: RR

Conc.

1.00

Units

mg/L

Flag

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Zinc		$\mathrm{mg/L}$	1.00	0.989	99	90 - 110	2008-09-03

# Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		$_{ m mg/L}$	0.125	0.123	98	90 - 110	2008-09-03

# Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			CCVs	CCVs	CCVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Arsenic		m mg/L	1.00	1.06	106	90 - 110	2008-09-03

# Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

Page Number: 329 of 352

rechore	 000000	•
65		

			$rac{ ext{CCVs}}{ ext{True}}$	${ m CCVs} \ { m Found}$	${ m CCVs} \ { m Percent}$	$rac{ ext{Percent}}{ ext{Recovery}}$	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Barium		$\mathrm{mg/L}$	1.00	1.00	100	90 - 110	2008-09-03

# Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${f Analyzed}$
Total Beryllium		m mg/L	1.00	0.994	99	90 - 110	2008-09-03

# Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Cadmium		$_{ m mg/L}$	1.00	1.02	102	90 - 110	2008-09-03

### Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cobalt		mg/L	1.00	0.986	99	90 - 110	2008-09-03

# Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			CCVs	CCVs	CCVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Chromium		$\mathrm{mg/L}$	1.00	1.00	100	90 - 110	2008-09-03

# Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

recpore D	acc.	OCTO	, С1	٠,	20
65					

			${ m CCVs} \ { m True}$	$\begin{array}{c} {\rm CCVs} \\ {\rm Found} \end{array}$	$rac{ ext{CCVs}}{ ext{Percent}}$	Percent Recovery	Date
Param	$\operatorname{Flag}$	${ m Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	$\operatorname{Recovery}$	$\operatorname{Limits}$	${ m Analyzed}$
Total Copper		$\mathrm{mg/L}$	1.00	0.988	99	90 - 110	2008-09-03

### Standard (CCV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

Page Number: 330 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		m mg/L	1.00	0.982	98	90 - 110	2008-09-03

# Standard (CCV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Lead		$_{ m mg/L}$	1.00	0.993	99	90 - 110	2008-09-03

### Standard (CCV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Antimony		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-09-03

# Standard (CCV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Analyzed By: RR

			$\mathrm{CCVs}$	CCVs	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-09-03

### Standard (CCV-1)

QC Batch: 52016

Date Analyzed: 2008-09-03

Page Number: 331 of 352

			$rac{ ext{CCVs}}{ ext{True}}$	${ m CCVs} \ { m Found}$	$egin{array}{c}  ext{CCVs} \  ext{Percent} \end{array}$	$rac{ ext{Percent}}{ ext{Recovery}}$	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${\bf Analyzed}$
Total Tin		mg/L	1.00	1.04	104	90 - 110	2008-09-03

#### Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		$_{ m mg/L}$	1.00	1.03	103	90 - 110	2008-09-03

# Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Vanadium		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-09-03

### Standard (CCV-1)

QC Batch: 52016 Date Analyzed: 2008-09-03 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Zinc		m mg/L	1.00	0.999	100	90 - 110	2008-09-03

# Standard (ICV-1)

QC Batch: 52084 Date Analyzed: 2008-09-04 Analyzed By: TP

			ICVs	ICVs	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Mercury		$_{ m mg/L}$	0.00100	0.000992	99	90 - 110	2008-09-04

# Standard (CCV-1)

QC Batch: 52084 Date Analyzed: 2008-09-04 Analyzed By: TP

Page Number: 332 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			True	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Mercury		m mg/L	0.00100	0.000973	97	90 - 110	2008-09-04

#### Standard (ICV-1)

QC Batch: 52085 Date Analyzed: 2008-09-04 Analyzed By: TP

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Mercury		m mg/L	0.00100	0.000992	99	90 - 110	2008-09-04

# Standard (CCV-1)

QC Batch: 52085 Date Analyzed: 2008-09-04 Analyzed By: TP

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Mercury		$_{ m mg/L}$	0.00100	0.000981	98	90 - 110	2008-09-04

### Standard (ICV-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		$_{ m mg/L}$	0.125	0.126	101	90 - 110	2008-09-08

# Standard (ICV-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

			$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	IC Vs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Arsenic		m mg/L	1.00	1.02	102	90 - 110	2008-09-08

### Standard (ICV-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

Page Number: 333 of 352

пероп	Date:	October	ι,	200
65				

			- 61			_	
			m ICVs	ICVs	$_{ m ICVs}$	Percent	ъ.
D	T21	Units	True	Found	Percent	Recovery	Date
Param Total Barium	Flag	mg/L	Conc. 1.00	Conc. 1.06	Recovery 106	Limits 90 - 110	Analyzed 2008-09-08
Total Dallum		mg/ L	1.00	1.00	100	90 - 110	2006-09-06
Standard (ICV	-1)						
QC Batch: 5213	31		Date Analyzed	: 2008-09-0	08	Anal	yzed By: RR
			${ m ICVs}$	ICVs	$\operatorname{ICVs}$	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	Conc.	Conc.	Recovery	Limits	${ m Analyzed}$
Total Beryllium	8	mg/L	1.00	1.01	101	90 - 110	2008-09-08
Standard (ICV	-1)						
QC Batch: 5213	31		Date Analyzed	: 2008-09-0	08	Anal	yzed By: RR
			${ m ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$_{ m Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cadmium		$\mathrm{mg/L}$	1.00	1.05	105	90 - 110	2008-09-08
G: 1 1 (TGT)	m \						
Standard (ICV	-1)						
QC Batch: 5213	31		Date Analyzed	: 2008-09-0	08	Anal	yzed By: RR
			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Cobalt		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-09-08
Standard (ICV	-1)						
`	,						
QC Batch: 5213	31		Date Analyzed	: 2008-09-0	08	Anal	yzed By: RR
			${ m ICVs}$	$\mathrm{ICVs}$	${ m ICVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date

# Standard (ICV-1)

Total Chromium

Param

Flag

Units

mg/L

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

Conc.

1.03

Recovery

103

Limits

90 - 110

Analyzed

2008-09-08

Conc.

1.00

			ICVs	${ m ICVs}$	${ m ICVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	$\operatorname{Limits}$	Analyzed
Total Copper		m mg/L	1.00	1.02	102	90 - 110	2008-09-08

# Standard (ICV-1)

QC Batch: 52131 D.

Date Analyzed: 2008-09-08

Analyzed By: RR

Page Number: 334 of 352

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		mg/L	1.00	1.00	100	90 - 110	2008-09-08

# Standard (ICV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

			$\mathrm{ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Lead		$_{ m mg/L}$	1.00	1.06	106	90 - 110	2008-09-08

### Standard (ICV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Antimony		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-09-08

# Standard (ICV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

			ICVs	$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		$\mathrm{mg/L}$	1.00	1.01	101	90 - 110	2008-09-08

### Standard (ICV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Page Number: 335 of 352

Analyzed By: RR

			ICVs	${ m ICVs}$	${ m ICVs}$	Percent	
			True	Found	Percent	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Total Tin	Flag	mg/L	1.00	1.03	103	90 - 110	2008-09-08
10tai IIIi		mg/L	1.00	1.03	100	90 - 110	2000-09-00
Standard (I	CV-1)						
QC Batch: 52131			Date Analys	zed: 2008-09-	Analyzed By: RR		
			${ m ICVs}$	ICVs	${ m ICVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Thallium	m	$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-09-08
Standard (I	CV-1)						
QC Batch: 5	52131		Date Analyzed: 2008-09-08			Analyzed By: RR	
			${ m ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${\bf Analyzed}$
Param			1.00	1.05	105	90 - 110	2008-09-08

QC Batch: 52131 Date Analyzed: 2008-09-08

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Zinc		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

			CCVs	CCVs	CCVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		m mg/L	0.125	0.127	102	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

repore	Date.	October	٠,	_
65				

Param	$\operatorname{Flag}$	$\operatorname{Units}$	$egin{array}{c} \mathrm{CCVs} \\ \mathrm{True} \\ \mathrm{Conc.} \end{array}$	$\begin{array}{c} { m CCVs} \\ { m Found} \\ { m Conc.} \end{array}$	CCVs Percent Recovery	Percent Recovery Limits	$\begin{array}{c} \text{Date} \\ \text{Analyzed} \end{array}$
Total Arsenic		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-09-08

### Standard (CCV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

Page Number: 336 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Barium		m mg/L	1.00	1.06	106	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Beryllium		mg/L	1.00	1.03	103	90 - 110	2008-09-08

### Standard (CCV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cadmium		$_{ m mg/L}$	1.00	1.04	104	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Cobalt		mg/L	1.00	1.01	101	90 - 110	2008-09-08

# Standard (CCV-1)

 $QC \ Batch: \ 52131$ 

Date Analyzed: 2008-09-08

Page Number: 337 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Chromium		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-09-08

### Standard (CCV-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Copper		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		$_{ m mg/L}$	1.00	1.00	100	90 - 110	2008-09-08

### Standard (CCV-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Lead		$_{ m mg/L}$	1.00	1.05	105	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

			CCVs	CCVs	CCvs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Antimony		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131 Date Analyzed: 2008-09-08 Analyzed By: RR

repore	Date.	October	٠,	2000
65				

			${ m CCVs} \ { m True}$	${ m CCVs} \ { m Found}$	${ m CCVs} \ { m Percent}$	Percent Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}^{r}$	${ m Analyzed}$
Total Selenium		mg/L	1.00	1.05	105	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

Page Number: 338 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Tin		m mg/L	1.00	1.03	103	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	$\operatorname{Limits}$	Analyzed
Total Thallium		$_{ m mg/L}$	1.00	1.02	102	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Vanadium		$_{ m mg/L}$	1.00	1.06	106	90 - 110	2008-09-08

# Standard (CCV-1)

QC Batch: 52131

Date Analyzed: 2008-09-08

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	$\operatorname{Recovery}$	Limits	${ m Analyzed}$
Total Zinc		$_{ m mg/L}$	1.00	1.03	103	90 - 110	2008-09-08

# Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

repore	Date.	October	٠,	2000
65				

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		$\mathrm{mg/L}$	0.125	0.126	101	90 - 110	2008-09-09

### Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

Page Number: 339 of 352

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Arsenic		m mg/L	1.00	0.995	100	90 - 110	2008-09-09

# Standard (ICV-1)

 $QC\ Batch: \ 52201$ 

Date Analyzed: 2008-09-09

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Barium		$\mathrm{mg/L}$	1.00	1.06	106	90 - 110	2008-09-09

### Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Beryllium		$_{ m mg/L}$	1.00	1.00	100	90 - 110	2008-09-09

# Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

			ICVs	$1 \mathrm{CVs}$	$1\mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cadmium		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-09-09

### Standard (ICV-1)

 $QC\ Batch:\ 52201$ 

Date Analyzed: 2008-09-09

Param	$\operatorname{Flag}$	$\operatorname{Units}$	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	$egin{array}{c} { m Date} \\ { m Analyzed} \end{array}$
Total Cobalt		${ m mg/L}$	1.00	1.00	100	90 - 110	2008-09-09

# Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

Page Number: 340 of 352

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Chromium		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-09-09

# Standard (ICV-1)

 $QC\ Batch: \ 52201$ 

Date Analyzed: 2008-09-09

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Copper		m mg/L	1.00	1.02	102	90 - 110	2008-09-09

### Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		$_{ m mg/L}$	1.00	0.996	100	90 - 110	2008-09-09

# Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	$\operatorname{Recovery}$	Limits	Analyzed
Total Lead		$_{ m mg/L}$	1.00	1.06	106	90 - 110	2008-09-09

### Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

recpore	Date.	OCTODE	٠,	_
65				

Param	$\operatorname{Flag}$	$_{ m Units}$	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	$egin{aligned}  ext{Date} \  ext{Analyzed} \end{aligned}$
Total Antimony		$\mathrm{mg/L}$	1.00	1.00	100	90 - 110	2008-09-09
Standard (ICV-1) QC Batch: 52201			Date Analyzed:	2008-09-09		${ m Anal}$	yzed By: RR
			${ m ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	$\operatorname{Limits}$	Analyzed
Total Selenium		$_{ m mg/L}$	1.00	0.993	99	90 - 110	2008-09-09

# Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

Page Number: 341 of 352

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Tin		m mg/L	1.00	1.02	102	90 - 110	2008-09-09

# Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		$_{ m mg/L}$	1.00	1.02	102	90 - 110	2008-09-09

# Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

Analyzed By: RR

			1CVs	ICVs	$1 \mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Vanadium		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-09-09

### Standard (ICV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Page Number: 342 of 352

			ICVs	ICVs	${ m ICVs}$	Percent	
_			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	Date
Param	Flag	Units	Conc.	Conc.	Recovery	Limits	Analyzed
Total Zinc		mg/L	1.00	1.01	101	90 - 110	2008-09-09
Standard (C	CCV-1)						
QC Batch: 5	52201		Date Anal	yzed: 2008-09	Anal	yzed By: RR	
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		m mg/L	0.125	0.126	101	90 - 110	2008-09-09
Standard (C	,		Date Anal	yzed: 2008-09	-09	Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Arsenic		m mg/L	1.00	1.06	106	90 - 110	2008-09-09
Standard (C	CCV-1)						
QC Batch: 5	52201		Date Analyzed: 2008-09-09			Anal	yzed By: RR
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	Conc.	Recovery	Limits	${\bf Analyzed}$
Total Barium		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-09-09

# Standard (CCV-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR

			CCVs	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Beryllium		m mg/L	1.00	1.03	103	90 - 110	2008-09-09

# Standard (CCV-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Cadmium		m mg/L	1.00	1.07	107	90 - 110	2008-09-09

### Standard (CCV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

Page Number: 343 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cobalt		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-09-09

# Standard (CCV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	Analyzed
Total Chromium		$_{ m mg/L}$	1.00	1.04	104	90 - 110	2008-09-09

### Standard (CCV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Copper		mg/L	1.00	1.02	102	90 - 110	2008-09-09

# Standard (CCV-1)

QC Batch: 52201

Date Analyzed: 2008-09-09

Analyzed By: RR

			CCVs	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-09-09

### Standard (CCV-1)

 $QC\ Batch:\ 52201$ 

Date Analyzed: 2008-09-09

Page Number: 344 of 352

			${ m CCVs}$	${ m CCVs}$	CCVs	Percent	D /
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${f Analyzed}$
Total Lead		m mg/L	1.00	1.01	101	90 - 110	2008-09-09

# Standard (CCV-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${f Analyzed}$
Total Antimony		$\mathrm{mg/L}$	1.00	1.05	105	90 - 110	2008-09-09

# Standard (CCV-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Selenium		mg/L	1.00	1.05	105	90 - 110	2008-09-09

#### Standard (CCV-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Tin		$_{ m mg/L}$	1.00	1.07	107	90 - 110	2008-09-09

# Standard (CCV-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR

			CCVs	CCVs	CCVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		m mg/L	1.00	1.07	107	90 - 110	2008-09-09

# Standard (CCV-1)

QC Batch: 52201 Date Analyzed: 2008-09-09 Analyzed By: RR

					_		
			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Vanadium		$\mathrm{mg/L}$	1.00	1.04	104	90 - 110	2008-09-09

### Standard (CCV-1)

QC Batch: 52201 Date Analyzed: 2008-09-09

Analyzed By: RR

Page Number: 345 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Zinc		$\mathrm{mg/L}$	1.00	1.05	105	90 - 110	2008-09-09

### Standard (ICV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${ m Analyzed}$
Total Silver		mø/L	0.125	0.123	98	90 - 110	2008-09-11

#### Standard (ICV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			${ m ICVs}$	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Arsenic		$_{ m mg/L}$	1.00	0.995	100	90 - 110	2008-09-11

# Standard (ICV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			ICVs	ICVs	$\mathrm{ICVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Barium		mg/L	1.00	1.05	105	90 - 110	2008-09-11

### Standard (ICV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

Page Number: 346 of 352

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Beryllium		$\mathrm{mg/L}$	1.00	0.995	100	90 - 110	2008-09-11

### Standard (ICV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${f Analyzed}$
Total Cadmium		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-09-11

# Standard (ICV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Cobalt		mg/L	1.00	0.996	100	90 - 110	2008-09-11

### Standard (ICV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			${ m ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Chromium		$_{ m mg/L}$	1.00	1.04	104	90 - 110	2008-09-11

# Standard (ICV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Copper		m mg/L	1.00	1.01	101	90 - 110	2008-09-11

# Standard (ICV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			$\mathrm{ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Nickel		$\mathrm{mg/L}$	1.00	0.989	99	90 - 110	2008-09-11

# Standard (ICV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

Page Number: 347 of 352

			${ m ICVs}$	ICVs	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Lead		m mg/L	1.00	1.03	103	90 - 110	2008-09-11

# Standard (ICV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

			ICVs	ICVs	ICVs	$\operatorname{Percent}$	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Antimony		m mg/L	1.00	1.00	100	90 - 110	2008-09-11

### Standard (ICV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

			ICVs	${ m ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		$_{ m mg/L}$	1.00	0.986	99	90 - 110	2008-09-11

# Standard (ICV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

			$1 \mathrm{CVs}$	ICVs	$1\mathrm{CVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Tin		m mg/L	1.00	1.02	102	90 - 110	2008-09-11

### Standard (ICV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

	ecovery Date Limits Analyzed
<u> </u>	0 - 110 2008-09-11

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

Page Number: 348 of 352

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Vanadium		$\mathrm{mg/L}$	1.00	1.03	103	90 - 110	2008-09-11

# Standard (ICV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

			ICVs	$\mathrm{ICVs}$	ICVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Zinc		$_{ m mg/L}$	1.00	1.05	105	90 - 110	2008-09-11

### Standard (CCV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Silver		m mg/L	0.125	0.125	100	90 - 110	2008-09-11

# Standard (CCV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

			$\mathrm{CCVs}$	CCVs	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Arsenic		m mg/L	1.00	0.978	98	90 - 110	2008-09-11

# Standard (CCV-1)

 $QC \ Batch: \ 52279$ 

Date Analyzed: 2008-09-11

Page Number: 349 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Barium		$\mathrm{mg/L}$	1.00	1.08	108	90 - 110	2008-09-11

### Standard (CCV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${f Analyzed}$
Total Beryllium		mg/L	1.00	1.08	108	90 - 110	2008-09-11

# Standard (CCV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cadmium		$_{ m mg/L}$	1.00	1.00	100	90 - 110	2008-09-11

### Standard (CCV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Cobalt		$\mathrm{mg/L}$	1.00	0.991	99	90 - 110	2008-09-11

# Standard (CCV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			CCVs	CCVs	CCVs	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Chromium		m mg/L	1.00	1.04	104	90 - 110	2008-09-11

# Standard (CCV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			${ m CCVs} \ { m True}$	${ m CCVs} \ { m Found}$	$egin{array}{c}  ext{CCVs} \  ext{Percent} \end{array}$	$egin{array}{c}  ext{Percent} \  ext{Recovery} \end{array}$	Date
Param	Flag	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Copper		$\mathrm{mg/L}$	1.00	1.02	102	90 - 110	2008-09-11

#### Standard (CCV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

Page Number: 350 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Nickel		m mg/L	1.00	0.974	97	90 - 110	2008-09-11

# Standard (CCV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Lead		$\mathrm{mg/L}$	1.00	1.00	100	90 - 110	2008-09-11

### Standard (CCV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Antimony		$_{ m mg/L}$	1.00	1.01	101	90 - 110	2008-09-11

# Standard (CCV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Analyzed By: RR

			$\mathrm{CCVs}$	CCVs	$\mathrm{CCVs}$	$\operatorname{Percent}$	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	$\operatorname{Recovery}$	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	Limits	${ m Analyzed}$
Total Selenium		$\mathrm{mg/L}$	1.00	0.958	96	90 - 110	2008-09-11

### Standard (CCV-1)

QC Batch: 52279

Date Analyzed: 2008-09-11

Page Number: 351 of 352

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Tin		m mg/L	1.00	1.00	100	90 - 110	2008-09-11

#### Standard (CCV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	$\operatorname{Recovery}$	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Thallium		mg/L	1.00	1.02	102	90 - 110	2008-09-11

# Standard (CCV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	Units	$\operatorname{Conc}$ .	$\operatorname{Conc}$ .	Recovery	Limits	Analyzed
Total Vanadium		$_{ m mg/L}$	1.00	1.03	103	90 - 110	2008-09-11

### Standard (CCV-1)

QC Batch: 52279 Date Analyzed: 2008-09-11 Analyzed By: RR

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc}$ .	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Zinc		$_{ m mg/L}$	1.00	1.05	105	90 - 110	2008-09-11

# Standard (ICV-1)

QC Batch: 52284 Date Analyzed: 2008-09-11 Analyzed By: TP

			1 C V s	$1 \mathrm{CVs}$	$1 \mathrm{CVs}$	Percent	
			$\operatorname{True}$	$\operatorname{Found}$	$\operatorname{Percent}$	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	Conc.	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Mercury		m mg/L	0.00100	0.00104	104	90 - 110	2008-09-11

### Standard (CCV-1)

QC Batch: 52284 Date Analyzed: 2008-09-11 Analyzed By: TP

Report Date: October 7, 2008

Work Order: 8080828 HELSTF GROUNDWATER

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	Date
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc}$ .	Recovery	$\operatorname{Limits}$	${\bf Analyzed}$
Total Mercury		$\mathrm{mg/L}$	0.00100	0.000979	98	90 - 110	2008-09-11

# Standard (ICV-1)

QC Batch: 52287

Date Analyzed: 2008-09-11

Analyzed By: TP

Page Number: 352 of 352

			ICVs	ICVs	ICVs	Percent	
			$\operatorname{True}$	Found	Percent	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	$\operatorname{Conc.}$	$\operatorname{Conc.}$	Recovery	Limits	Analyzed
Total Mercury		$\mathrm{mg/L}$	0.00100	0.00104	104	90 - 110	2008-09-11

# Standard (CCV-1)

QC Batch: 52287

Date Analyzed: 2008-09-11

Analyzed By: TP

			$\mathrm{CCVs}$	$\mathrm{CCVs}$	$\mathrm{CCVs}$	Percent	
			$\operatorname{True}$	Found	$\operatorname{Percent}$	Recovery	$\operatorname{Date}$
Param	$\operatorname{Flag}$	$\operatorname{Units}$	Conc.	$\operatorname{Conc.}$	Recovery	Limits	${ m Analyzed}$
Total Mercury		m mg/L	0.00100	0.00104	104	90 - 110	2008-09-11